RICOH VT6000

MODEL

SERVICE MANUAL

IMPORTANT SAFETY NOTICES

PREVENTION OF PHYSICAL INJURY

1. Before disassembling or assembling parts of the printer and peripherals, make sure that the power cord is unplugged.
2. The wall outlet should be near the copier and easily accessible.
3. If any adjustment or operation check has to be made with exterior covers off or open while the main switch is turned on, keep hands away from electrified or mechanically driven components.

HEALTH SAFETY CONDITIONS

1. If you get ink in your eyes by accident, try to remove it with eye drops or flush with water as first aid. If unsuccessful, get medical attention.
2. If you ingest ink by accident, induce vomiting by sticking a finger down your throat or by giving soapy or strong salty water to drink.

OBSERVANCE OF ELECTRICAL SAFETY STANDARDS

1. The printer and its peripherals must be installed and maintained by a customer service representative who has completed the training course on those models.

⚠CAUTION

The RAM board has a lithium battery which can explode if handled incorrectly. Replace only with the same type of RAM board. Do not recharge or burn this battery. Used RAM boards must be handled in accordance with local regulations.

⚠ATTENTION

La carte RAM comporte une pile au lithium qui présente un risque d'explosion en cas de mauvaise manipulation. Remplacer la pile uniquement par une carte RAM identique. Ne pas recharger ni brûler cette pile. Les cartes RAM usagées doivent être éliminées conformément aux réglementations locales.

SAFETY AND ECOLOGICAL NOTES FOR DISPOSAL

1. Dispose of replaced parts in accordance with local regulations.
2. Used ink and masters should be disposed of in an envionmentally safe manner and in accordance with local regulations.
3. When keeping used lithium batteries (from the main control boards) in order to dispose of them later, do not store more than 100 batteries (from the main control boards) per sealed box. Storing larger numbers or not sealing them apart may lead to chemical reactions and heat build-up.

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SECTION 1

OVERALL MACHINE INFORMATION

1. OVERALL MACHINE INFORMATION

1.1 SPECIFICATIONS

Configuration:	Table-top
Master Processing:	Digital
Printing Process:	Fully automatic one-drum stencil system
Original Type:	Sheet/Book
Original Size:	Maximum 307 mm x 432 mm (12.0" x 17.0")
Reduction Ratios:	Inch version: 93%, 77%, 74%, 65% Metric version: 93%, 87%, 82%, 71%
Enlargement Ratios:	Inch version: 155%, 129%, 121% Metric Version: 141%, 122%, 115%
Zoom:	From 50% to 200% in 1% steps
Directional Magnification:	Vertical: From 50% to 200% in 1% steps Horizontal: From 50% to 200% in 1% steps
Image Mode:	Letter, Photo, Letter/Photo
Color Printing:	Drum unit replacement system (Red, Blue, Green, Brown, Yellow, Purple, Navy, and Maroon)
Master Feed/Eject:	Roll master, automatic feed/eject
Leading Edge Margin:	5 mm (0.2")
Trailing Edge Margin:	3 mm (0.12")
Print Paper Size:	Maximum 297 mm x 432 mm (11.6" x 17.0") Minimum 90 mm x 148 mm (3.6" x 5.8")
Printing Area:	A3 drum (original drum) More than 290 mm x 412 mm Optional A3 drum More than 290 mm x 407 mm Optional A4 drum More than 290 mm x 204 mm
Print Paper Weight:	47.1 g/m^2 to 209.3 g/m^2 (12.5 lb to 55.6 lb)

Printing Speed:	60, 75, 90, 105, 120 sheets/minute
First Copy Time (Master Process Time):	Less than 46.0 seconds (A3) Less than 37.0 seconds (A4)
Second Copy time (First Print Time):	Less than 48.0 seconds (A3) Less than 39.5 seconds (A4)
Paper Feed Table Capacity:	1,000 sheets (80 g/m^2, 20 lb)
Paper Delivery Table Capacity:	1,000 sheets (80 g/m^2, 20 lb)
Power Source:	120 V, 50/60 Hz: 3.6 A (for N. America) 220/240 V, 50/60 Hz: 2.0 A (for Europe, Asia)
Power Consumption:	120 V, 50/60 Hz: 360 W (for N. America) 220/240 V, 50/60 Hz: 350 W (for Europe, Asia)
Weight:	120 V version: 127 kg 220/240 V version: 127 kg Cabinet: 23.5 kg

Dimensions (W x D x H):

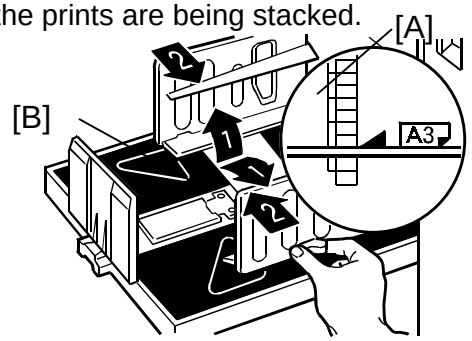
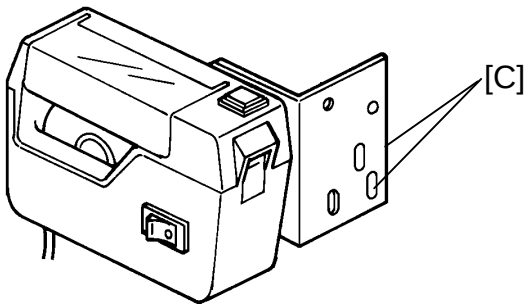
	Width	Depth	Height
Stored	719 mm, 28.4"	698 mm, 27.5"	644 mm, 25.4"
Stored with document feeder	719 mm, 28.4"	698 mm, 27.5"	666 mm, 26.3"
Set up	719 mm, 28.4"	698 mm, 27.5"	644 mm, 25.4"
Set up with cabinet	719 mm, 28.4"	698 mm, 27.5"	1,070 mm, 42.2"
Set up with document feeder	1,331 mm, 52.5"	698 mm, 27.5"	666 mm, 26.3"
Set up with cabinet and document feeder	1,331 mm, 52.5"	698 mm, 27.5"	1,092 mm, 43.0"

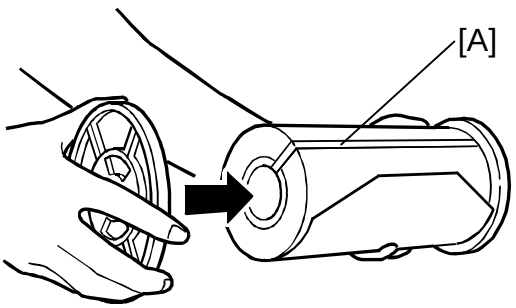
Original Scanning Time:	3.07 ms/line
Master Making Density:	600 dpi (CCD: 400 dpi)
Master Eject Box Capacity:	More than 70 masters under low temperature More than 100 masters at 23 °C, 73°F and over
Paper Separation:	Friction roller/center separation system
Feed Table Side Plate Movement:	88 mm to 336 mm (3.46" to 13.2")
Side Registration:	± 10 mm
Vertical Registration:	More than +10 mm, -20 mm

Ink Supply:	Automatic ink supply system	
Paper Delivery:	Air knife/vacuum delivery	
Print Counter:	7 digits	
Supplies:	Master	Thermal master 320 mm width 370 masters/roll (with A4 drum) 250 masters/roll (with A3 drum) (VT-6 master)
		Max. run length 2000 prints
	Ink	1000 cc ink pack (black) 600 cc ink pack (Red, Blue, Green, Brown, Yellow, Purple, Navy, Maroon)

1.2 MAJOR DIFFERENCES BETWEEN THE C223 AND THE C228

No.	Item	Details
1	Thermal Head	A new 600 dpi thermal head is used.
2	Thermal Head Pressure Release Mechanism	The thermal head is pressed against the platen roller only during the master making process. A unique dc motor is used for this mechanism. For details, refer to 'Master Feed' in the Detailed Section Descriptions section.
3	Improvements for Better Master Feeding in the Master Feed Unit	The new master is thinner and has a smoother surface. Some improvements have been made to improve master feed. For details, refer to 'Master Feed' in the Detailed Section Descriptions section.
4	Paper Feed Roller	The core of the paper feed roller has been changed to improve paper feed. For details, refer to 'Paper Feed' in the Detailed Section Descriptions section.
5	Paper Separation Plate	The shape of the separation plate has been changed for better paper feeding. For details, refer to 'Paper Feed' in the Detailed Section Descriptions section.
6	Paper Feed Cam and Printing Pressure Cam	For better printing quality, the shape of the printing pressure cam (the cam profile) has been changed. Also, the shapes of the two paper feed rollers have been changed in order to make the paper registration more accurate. For details, refer to 'Paper Feed' and 'Printing' in the Detailed Section Descriptions section.
7	Paper Detection System for Starting Applying the Printing Pressure	For better printing, the printing pressure application timing has been changed. Because of the strictly controlled timing, a photocoupler (the paper registration sensor) is used to detect when to start applying the printing pressure. (The paper detection feeler used in the C223 has been removed.) For details, refer to 'Printing' in the Detailed Section Descriptions section.
8	Master Eject Roller	Grooves have been made in the lower master feed rollers to improve master feed. For details, refer to 'Master Eject' in the Detailed Section Descriptions section.

No.	Item	Details
9	Paper Delivery Table	The C228 uses a new paper delivery table. (This table is also used for the recent C223 because of a modification.) This new table has small guide plates [A] on the front and rear side fences. The guide plates stack the prints more evenly. The small guide plates [B], on the bottom of each side fence, keep the prints aligned in the center of the table while the prints are being stacked.  C228V500.WMF Due to the new paper delivery table design, the set position of the optional tape marker is different from that for the C223. Use the screw holes [C] shown below.  C532I504.PCX
10	Thermal Head Drive	The voltage to the thermal heating elements in the thermal head is different from that of the C223. The DC/DC Converter Board which is newly added supplies the voltage while using the same power supply board as the C223. Also, the thermal head drive board used in the C223 has been removed. The function has been built into the image processing board.
11	Image Shifting Mode	The shift range in the backward direction in image shifting mode has been changed from 15 mm to 10 mm. This is due to the changed printing pressure application timing. (In the forward direction, it is 20 mm as before.)
12	Make-up Function	The memory chips for the Make-up function, which was an option for the C223, are built into the image processing board.

No.	Item	Details
13	New Replacement and Adjustment Procedures	• The thermal head voltage adjustment procedure has been changed. • The adjustment standard for the second feed roller start timing has been changed from 177° to 144°. • A remark has been added to the paper feed roller removal procedure. • The adjustment standard for the exit pawl timing has been changed from 230 ± 2° to 228 ± 2°. For details, refer to the Replacement and Adjustment section.
14	New Master	A new more heat-sensitive master is used to improve the printing quality. Due to the new master material, the capacity of the master eject box has been increased. Because the new master surface is slippery, the new master roll is tightened with tape [A] as shown below to prevent the roll from becoming loose. The master roll installation method has been changed. (For details, refer to 'Installation Procedure' in the Installation section.)  C228V502.WMF

No.	Item	Details
15	New SP Modes	The default setting for the thermal head energy for the economy mode (SP35-2) has been changed from -35% to -30%. (In other words, the energy used in economy mode has been increased.) The following SP modes are new for the C228: SP51: Clear Multi Copy SP52: Compress W Start Key SP78-1: Letter/Pht Mode [CS] SP78-2: Clear/Original **Note:** SP51 and SP78 are accessible to users. SP78 also can be registered in CS mode. **- Functions -** SP51: Resets the Combine 2 Originals or Combined Print function (if it has been set) after the master making process. There are two options: 0: No, 1: Yes. “0” is the default. SP52: The masters in the master eject box can be compressed every time the Master Making key is pressed. There are two options: 0: No, 1: Yes. “0” is the default. **Note:** If this mode is enabled, it reduces the possibility of the master eject belts slipping off, which tends to occur when the master box is full. SP78-1: Select whether the reproduction of letter mode areas is emphasized when Letter/Photo mode is used. There are two options: 0: Standard, 1: Emphasized. “0” is the default. SP78-2: Select whether the image mode (letter, photo, or letter/photo) is to be returned to the default setting when master making is finished. There are two options: 0: No, 1: Yes. “0” is the default.
16	New Input/Output Check Mode	The following are the new items for the Input/Output Check Mode: Input: 51 SN: Paper Registration (Paper Registration Sensor) Input: 52 SN: T. Head Position (Thermal Head Pressure Release Sensor) Output: 42 MOTOR: T. Head Up/Down (Turns on the thermal head pressure release motor.)

SECTION 2

DETAILED SECTION DESCRIPTIONS

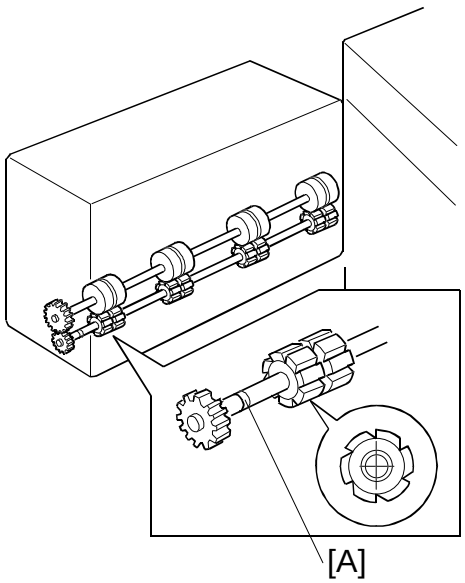
2. DETAILED SECTION DESCRIPTIONS

2.1 MASTER EJECT

Grooves have been added on the lower master eject rollers for better master feeding.

⚠CAUTION

The lower master eject roller must be installed the correct way around. The groove [A] on the shaft (see the illustration) must be on the operation side.



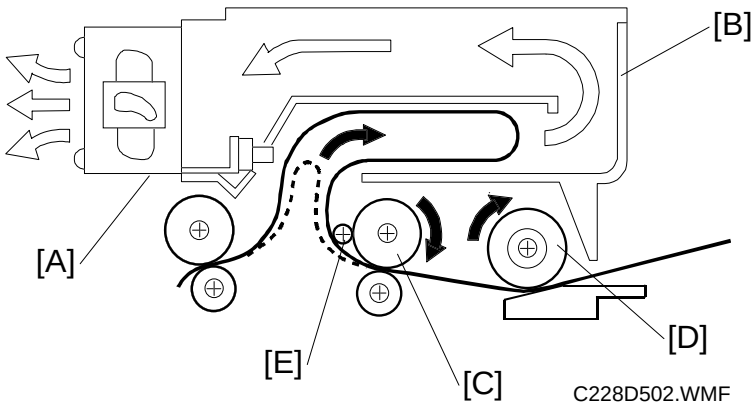
C228D501.WMF

2.2 MASTER FEED

2.2.1 MASTER FEED MECHANISMS

A 600 dpi thermal head and a new more heat-sensitive master is used to improve the printing quality. The new master is thinner and has a smoother surface. The following improvements are implemented to improve master feed.

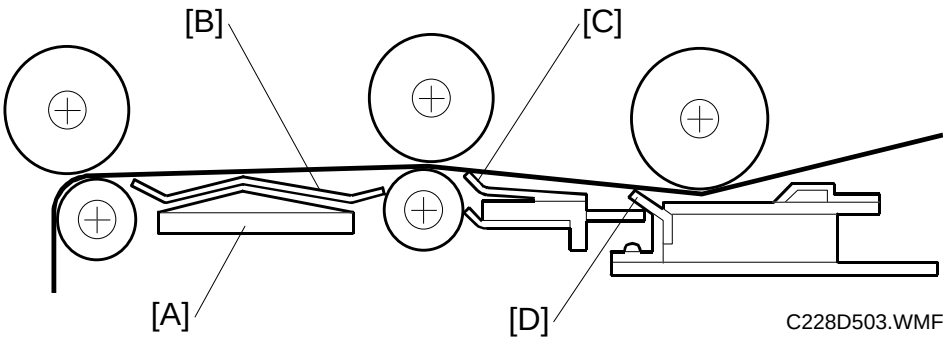
1. Three master buffer fan motors [A] are used instead of the one fan motor used in the C223. This generates stronger suction to guide the master into the master box [B].



2. To ensure correct master feed, the material of the upper master feed roller [C] has been changed to an anti-static rubber. (A sponge-like material was used for the C223.)

   The new master feed roller [C] rotates slightly faster than the platen roller [D]. This stretches the master on the thermal head (under the platen roller) and makes sure that the master is made accurately. A torque limiter built into the upper master feed roller gear can release the master feed force to prevent the master from being damaged in this area.

   Also, the counter roller [E] has been added to prevent the master from wrapping around the upper master feed roller.

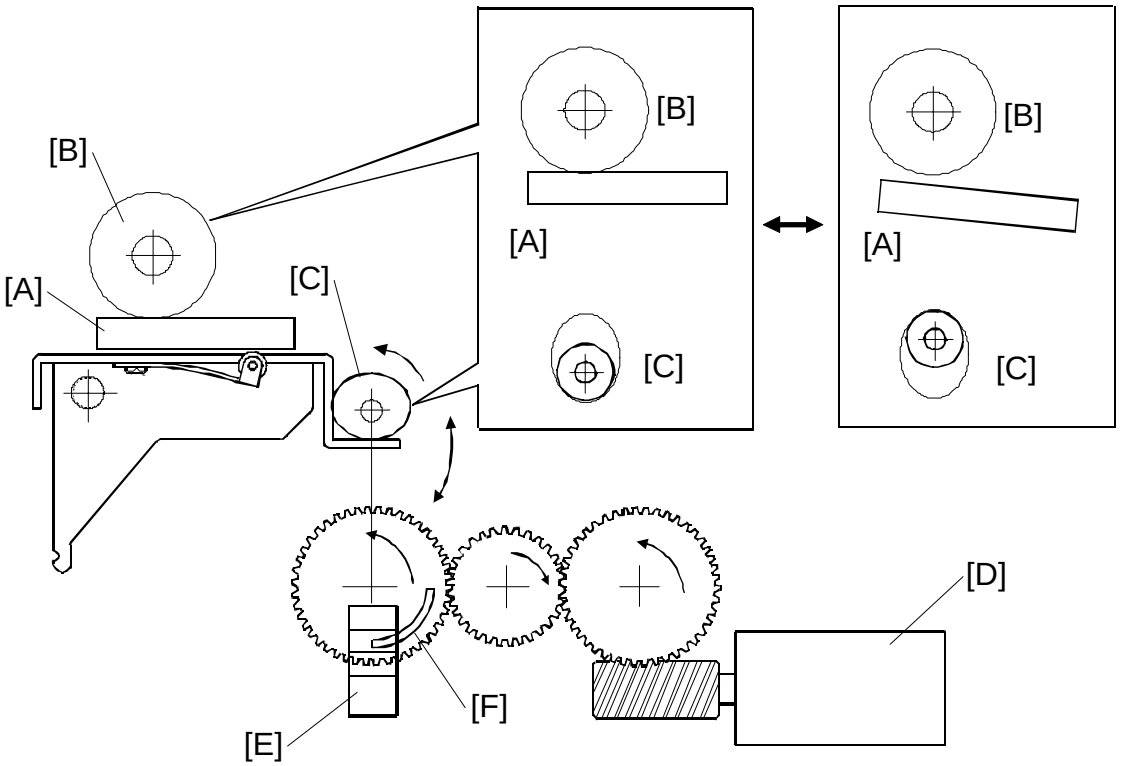


3. A metal master guide plate was used between the master feed roller and reverse roller for the C223. This was good for grounding static electricity. However, when static electricity is grounded, the master tends to stick to the guide plate. As a thinner master is used for the C228, the guide plate [A] is made of a plastic material. This prevents the master from being stuck on the guide plate surface even if static electricity is generated. Also, ribs have been added to the new guide plate to feed the master more smoothly.

4. Four strips of mylar [B] have been added to the surface of the master guide plates. This can prevent the master from catching on the rollers under the master feed and reverse rollers. Other strips of mylar are used in front of the master feed roller [C] and after the platen roller [D].

   NOTE: These mylar strips must be carefully repositioned when the rollers are reinstalled.

2.2.2 THERMAL HEAD PRESSURE RELEASE MECHANISM



The thermal head [A] is pressed against the platen roller [B] only during the master making process. The thermal head position is moved up and down by changing the position of the cam [C].

The cam position is changed by the thermal head pressure release motor [D] via gears. The thermal head pressure release sensor [E] monitors the cam position. The sensor, which is a photointerrupter, is interrupted by the shutter mounted on the gear [F] as the pressure release motor turns to maintain the cam position.

2.3 PAPER FEED

To improve paper feed, especially for thin paper, the paper feed roller and the separation plate have been changed.

In addition, the shapes of the two paper feed cams (the cam profiles) have been changed in order to make the paper registration more accurate.

With the new cams, the leading edge of the paper reaches the second feed roller faster than before. Then, the second feed roller can start feeding the paper earlier.

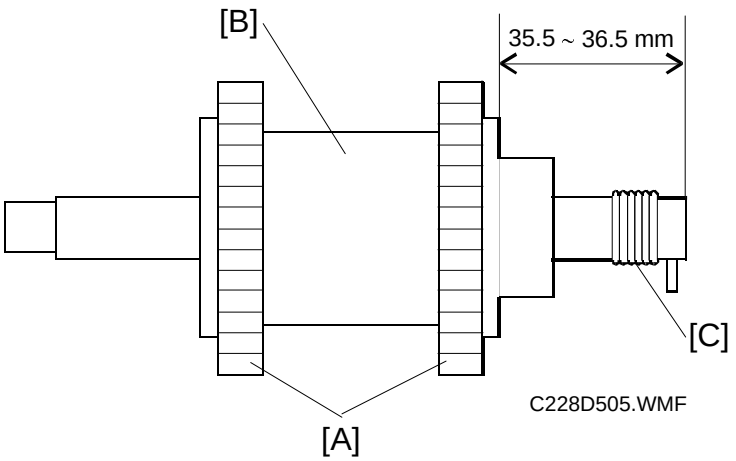
Thanks to this, the second feed roller can start feeding the paper at a lower transportation speed. (The time that the paper reaches the press roller position is still the same, but the acceleration from the second feed roller has become more moderate.) As a result, the paper registration has become more accurate.

Since the timing for the second feed roller to start feeding the paper was advanced, the paper detection feeler used in the C223 could not be used. A photocoupler is used instead. For more details about this, refer to the Printing section.

NOTE: 1) Due to the new cams, the adjustment values for second feed roller operation are changed. For details, refer to ‘Feed Length of the Second Feed Roller Adjustment‘ and ‘Second Feed Roller Start Timing Adjustment‘ in the ‘Replacement and Adjustment’ section. (The ‘Feed Length of the Paper Feed Roller Adjustment’ procedure is still the same.)

2) The new paper feed cams cannot be used on the older models since those models use the paper detection feeler.

2.3.1 PAPER FEED ROLLER



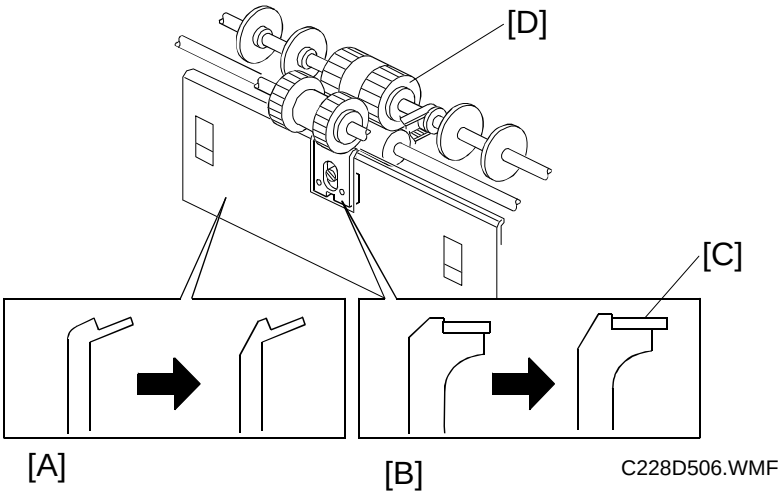
In this model, the two rubber rollers [A] on the core roller are separated. This helps to prevent creasing of paper that can be caused by the narrower roller assembly of the C223. (This was likely with very thin paper.)

The material of the core roller [B] was changed from plastic to metal for better stiffness. As a result, to balance the weight of the whole paper feed roller unit, the number of balancing weight plates on the feed roller bracket was reduced from three to two.

Since the weight of the paper feed roller itself has increased, the roller tends to overrun (it keeps on feeding paper) after the roller driving force stops. To prevent this, a spring [C] which works as a brake has been added at the end of the shaft.

NOTE: When servicing, make sure that the core roller is between 35.5 mm and 36.5 mm from the end of the shaft.

2.3.2 PAPER SEPARATION PLATE



If the leading edge of paper stacked on the paper table curls downwards, it tends to be caught by the separation plate and this causes a jam. The shape of the separation plate [A] has been changed (see the diagram) to improve paper feed in such a case.

For the same purpose, the shape of the upper edge of the entrance plate [B] (which holds the separation plate) has been changed as shown.

The rubber part of the separation plate [C] has been lengthened to improve paper feed, especially for thick paper. The lengthened rubber can guide the paper leading edge to the upper separation roller [D] surface more precisely. Because of this, the paper edge hits the upper separation roller more gently. This prevents the paper leading edge from being damaged at the area where the separation plate (the rubber part) contacts the upper separation roller surface. (This was likely with thick paper.)

2.4 PRINTING

2.4.1 OVERVIEW

Printing Pressure Cam

For better printing quality, the shape of the printing pressure cam (the cam profile) has been changed.

The new cam applies printing pressure to the drum faster than before. The press roller is pressed against the ink roller (the master and the drum screens are in between) before the leading edge of the paper reaches this section.

In the C223, the press roller is pressed against the ink roller just when the paper leading edge reaches this point. In this case, the paper leading edge is strongly pressed against the master surface on the drum. Since the new master is thinner and delicate, the paper leading edge tends to damage the master surface if the same printing pressure cam is used, especially during a long printing run. (If the master surface is damaged, ink will leak and transfer onto the paper.) The new printing pressure cam can avoid this situation.

NOTE: 1) Because of the new printing pressure cam, the adjustment values (angles) for printing pressure application timing and exit pawl operation timing are changed. Refer to 'Pressure Timing Adjustment' and 'Exit Pawl Timing Adjustment' in the 'Replacement and Adjustment' section.
2) The new printing pressure cam cannot be used in the older models. Because of the new cam profile, the shift range in the backward direction in image shifting mode has been changed from 15 mm to 10 mm. (In the forward direction, it is 20 mm as before.)

Paper Detection and Printing

In the C223, the paper detection feeler was used in order to prevent the press roller from contacting the drum (without paper) and getting ink on it when a paper misfeed occurred before the paper reached the press roller.

The paper detection feeler could be pressed downwards by paper since a gap between the paper detection arm and the pressure on/off lever was created when the widest part of the pressure cam reached the bearing on the pressure on/off lever. With the earlier second feed roller start timing, this gap cannot be created. Therefore, the same mechanism is not used. (The timing was changed to make paper registration more accurate; see the Paper Feed section for details.)

NOTE: For the details of the paper detection feeler operation, refer to the C223 Service Manual. (Section 5.2, 'Paper Detection And Printing Pressure On/Off Mechanism' in the 'Detailed Section Descriptions' section.)

Instead of the paper detection feeler, the registration sensor (a photocoupler) is used. When the sensor detects the paper, the printing pressure solenoid energizes to start applying the printing pressure. (In the C223, the printing pressure solenoid was energized as soon as paper feed started.) The sensor is also used as a paper jam detector.

For more details about this mechanism, refer to the following ‘Paper Detection and Printing Pressure On/Off Mechanism’ section.

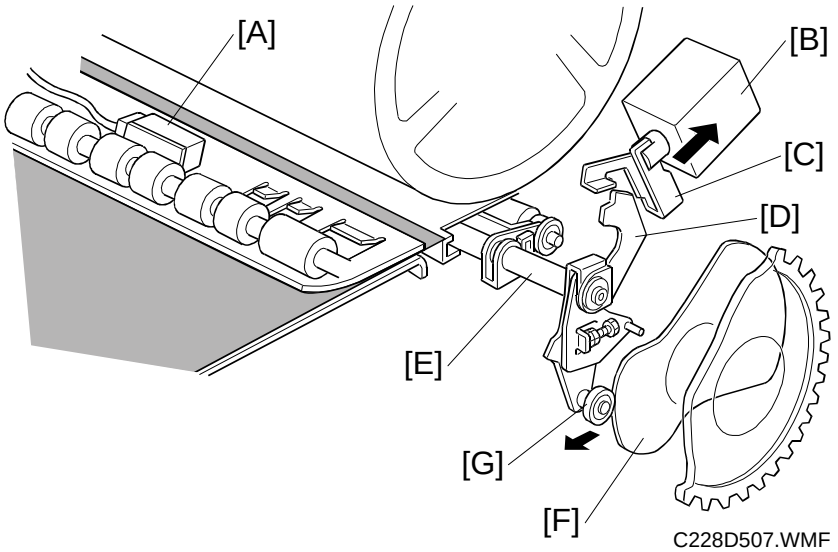
Quality Start

The detection arm release solenoid which was used in the C223 has been removed. Since the paper detection feeler has been removed, the detection arm release solenoid is not necessary to start the drum stroke operation in the quality start mode.

When the drum stroke operation starts, the printing pressure solenoid turns on. This disengages the pressure on/off lever and starts applying the printing pressure.

NOTE: For the details of the quality start mode operation, refer to the C223 Service Manual. (Section 5.4 ‘Quality Start Operation’ in the ‘Detailed Section Descriptions’ section.)

2.4.2 PAPER DETECTION AND PRINTING PRESSURE ON/OFF MECHANISM



When the paper is detected by the paper registration sensor [A], the printing pressure solenoid [B] is energized. The stopper arm [C] then disengages the pressure on/off lever [D]. The pressure on/off lever, which is connected to the end of the press roller arm [E], starts moving when the printing pressure cam [F] starts moving; the cam moves bearing [G], which is on the lever. The press roller is pressed against the ink roller.

The printing pressure solenoid is de-energized when the printing pressure sensor is activated; this is soon after it is energized. The stopper arm [C] returns and is pressed against the pressure on/off lever, due to tension from a spring. (The stopper arm just rides on the edge of the pressure on/off lever at this time.) To finish applying the printing pressure, the bearing [G] on the pressure on/off lever is pushed by the printing pressure cam and the lever turns clockwise, until it is engaged by the stopper arm.

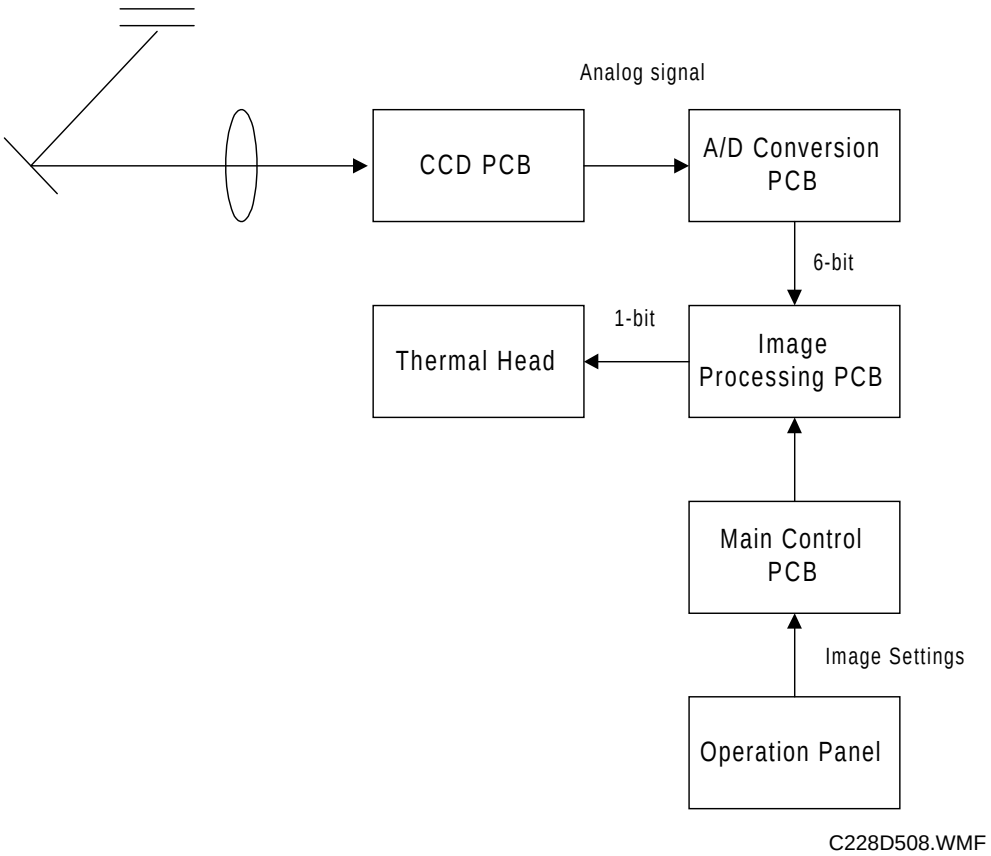
If the next sheet of paper is detected by the registration sensor within a certain period, the printing pressure solenoid is again energized to disengage the pressure on/off lever. The printing pressure for the next sheet of paper starts being applied.

If the registration sensor is not activated, the machine detects a paper misfeed condition (Location B Misfeed). In this case, the printing pressure solenoid stays de-energized and the printing pressure is not applied. This can prevent the press roller contacting the drum (without paper) and getting ink on it because of the paper misfeed.

NOTE: In the C223, Location B Misfeed was detected when the printing pressure sensor was not activated within a certain period.

2.5 IMAGE PROCESSING

2.5.1 OVERVIEW



The light reflected from the original goes to the CCD, which converts the light signal into an analog electrical signal. The analog signal is sent to the A/D conversion PCB, where it is changed to 6-bit digital data. The 6-bit data is changed to 1-bit data in the image processing PCB and it goes to the thermal head. The thermal head drive circuit is built into the image processing PCB.

The 6-bit to 1-bit conversion procedure depends on the image settings on the operation panel.

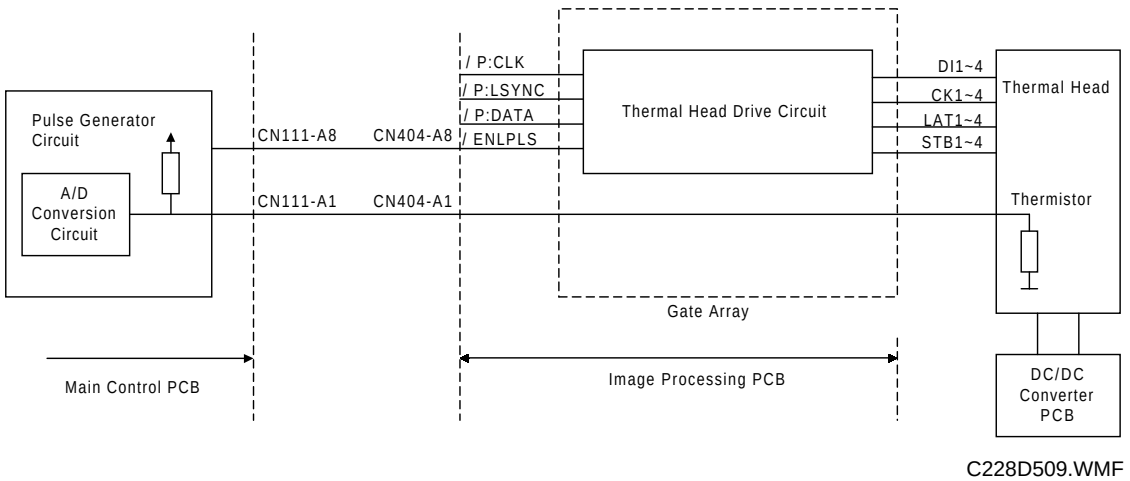
2.5.2 MASTER MAKING

The operation of the thermal head is just like that of the C223, except that the thermal head drive circuit has been built into the image processing board.

The new 600 dpi thermal head is used with the new more heat-sensitive master. The specifications of the thermal head are as follows:

- Density of Thermal Heating Elements: 600 dpi
- Number of Thermal Heating Elements: 7168 dots
- Maximum Master Making Width: 303.45 mm

2.5.3 THERMAL HEAD PROTECTION



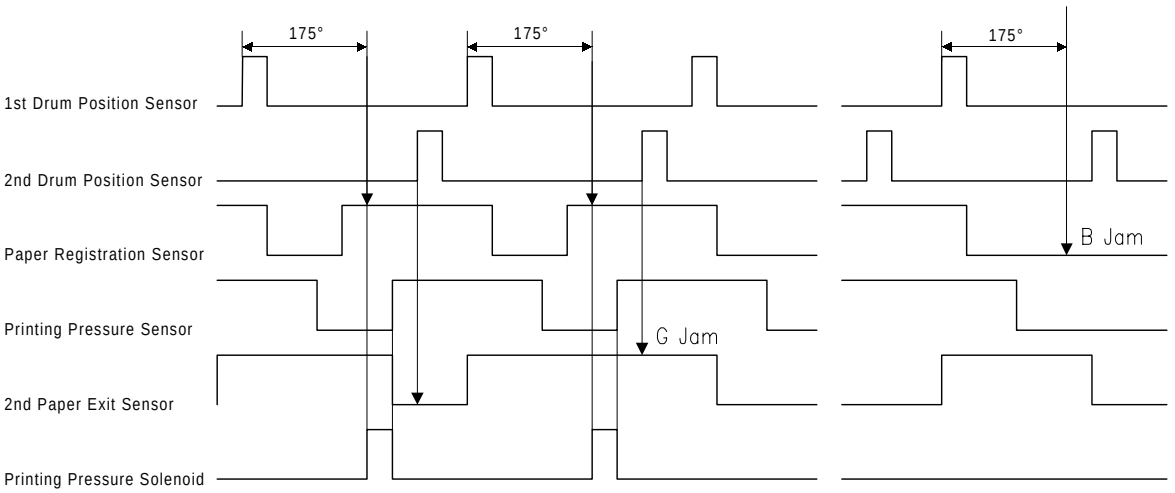
C228D509.WMF

The thermistor on the thermal heat prevents it from overheating when continuously processing a solid image.

The CPU checks for abnormal conditions when the Master Making key is pressed, and indicates an SC code on the operation panel under the following conditions:

SC Code	Conditions
E-04	The thermistor on the thermal head detected a temperature of over 54°C. (CN111-A1 is below 1.17 volts.)
E-09	The thermistor is open, or related connectors are not connected. (The signal level between CN111-A1 and GND is over 4.9 volts.)

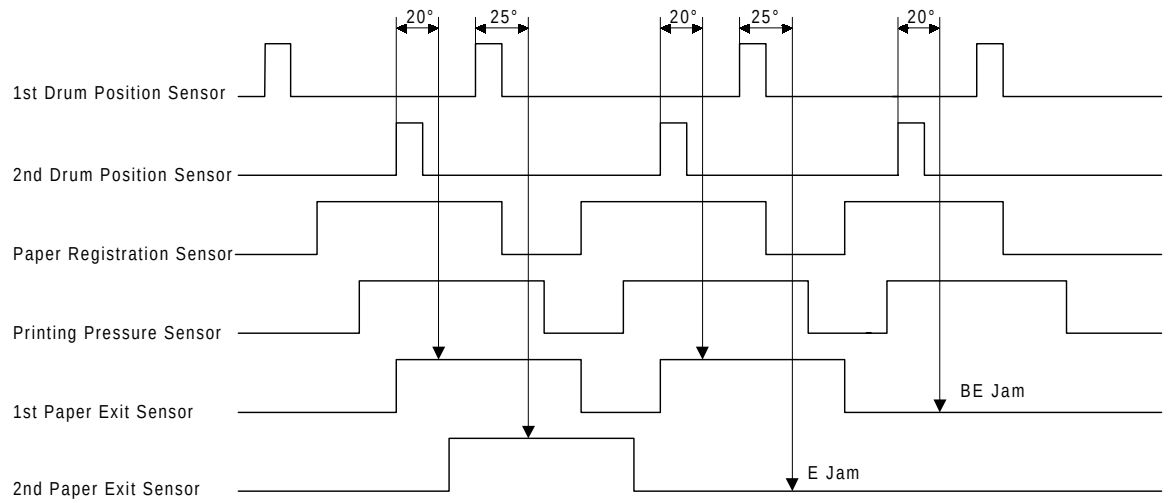
2.6 PAPER MISFEED DETECTION



C228D510.WMF

[a] When the drum has rotated 175° after activating the 1st drum position sensor, if the paper registration sensor is still OFF, a paper misfeed (Location B jam) is detected.

[b] When the 2nd drum position sensor turns on, if the 2nd paper exit sensor remains ON, a paper misfeed (Location G jam) is detected.



C228D511.WMF

[c] When the drum has rotated 20° after activating the 2nd drum position sensor, if the 1st paper exit sensor is still OFF, a paper misfeed (Location BE jam) is detected.

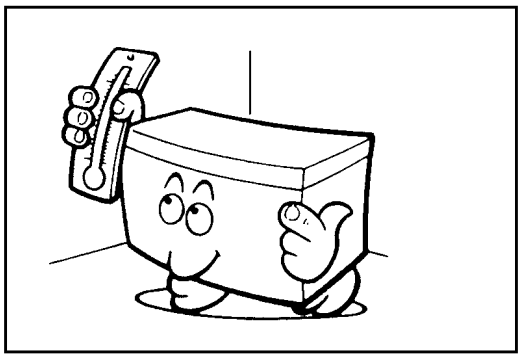
[d] When the drum has rotated 25° after activating the 1st drum position sensor, if the 2nd paper exit sensor is still OFF, a paper misfeed (Location E jam) is detected.

SECTION 3
INSTALLATION PROCEDURE

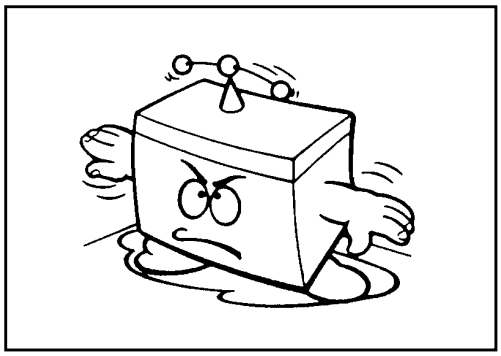
3. INSTALLATION

3.1 INSTALLATION REQUIREMENTS

3.1.1 OPTIMUM ENVIRONMENTAL CONDITIONS



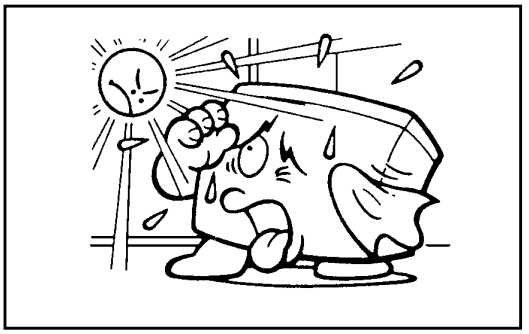
C223I518.PCX



C223I519.PCX

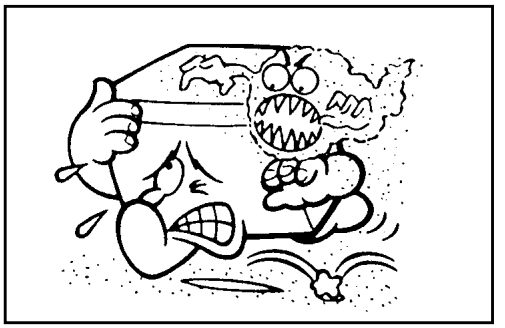
Temperature —	10 to 30°C (50 to 86°F)	On a strong and level base.
Humidity —	20 to 90 % RH	The machine must be level within 5 mm (13/64") both front to rear and left to right.

3.1.2 ENVIRONMENTS TO AVOID



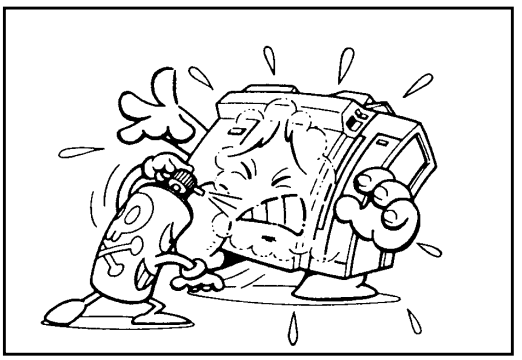
C223I520.PCX

Locations exposed to direct sunlight or strong light (more than 1,500 lux).



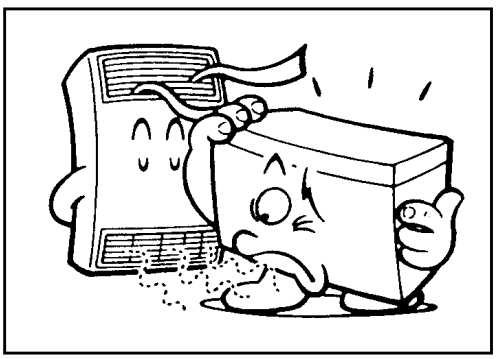
C223I521.PCX

Dusty areas.



C223I523.PCX

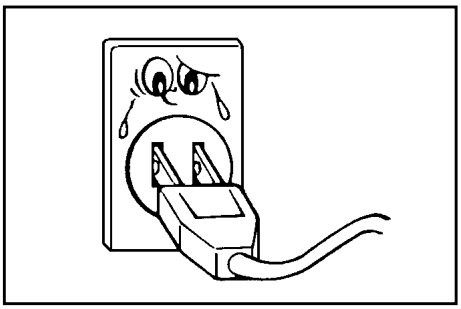
Areas with corrosive gases.



C223I525.PCX

Locations directly exposed to cool air from an air conditioner or reflected heat from a space heater. (Sudden temperature changes from low to high or vice versa may cause condensation within the machine.)

3.1.3 POWER CONNECTION

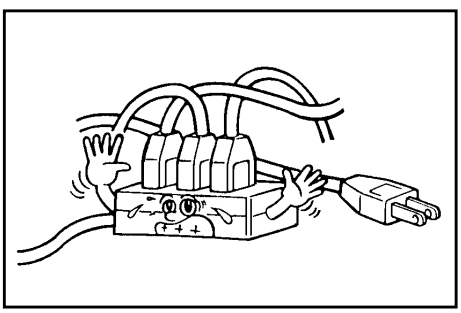


C223I524.PCX

Securely connect the power cord to a power source.

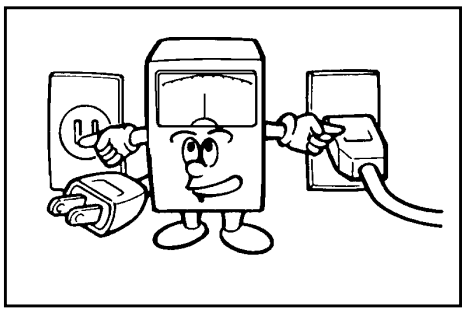
Make sure that the wall outlet is near the machine and easily accessible.

Make sure the plug is firmly inserted in the outlet.



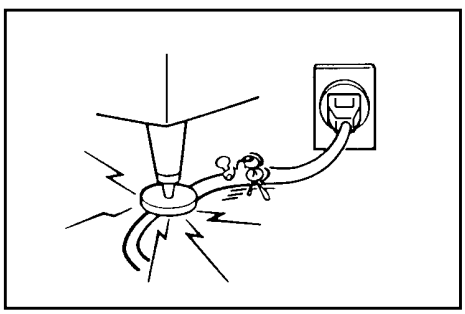
C223I515.PCX

Avoid multiwiring.



C223I516.PCX

Voltage must not fluctuate more than 10%.

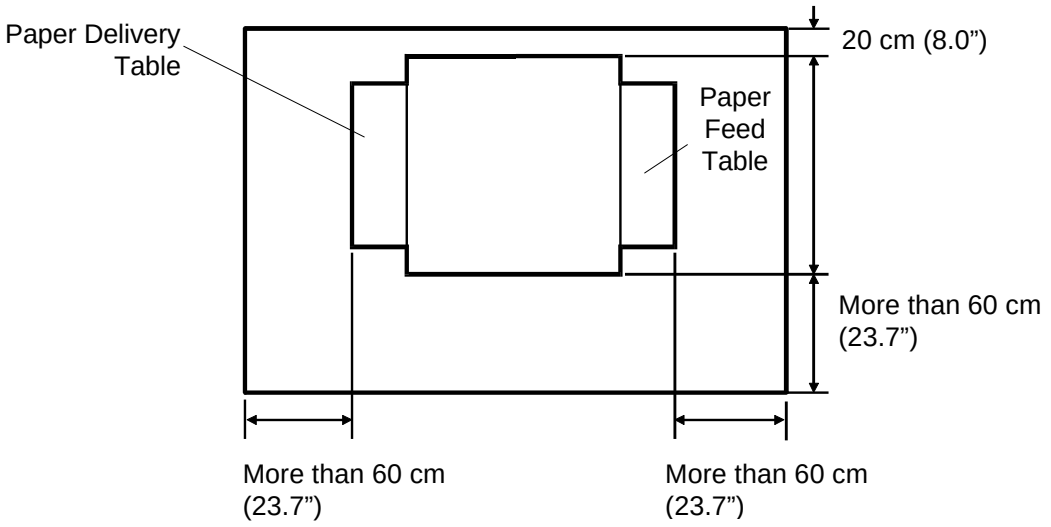


C223I517.PCX

Do not pinch the power cord.

3.1.4 ACCESS TO THE MACHINE

Place the machine near a power source, providing clearance as shown below.



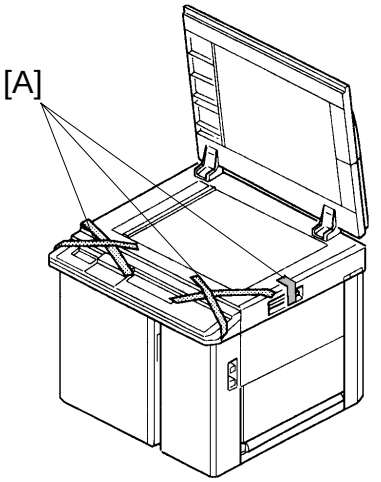
C223I526.WMF

3.2 ACCESSORY CHECK

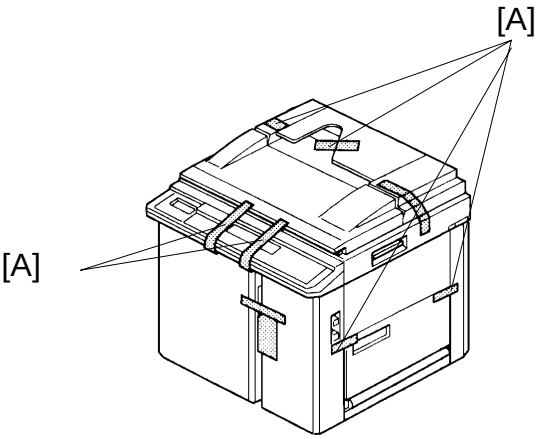
Make sure that you have the following accessories.

1. Operating Instructions (except for -27 models)
2. NECR (-17, -27 models only)
3. End Plate Prop
4. Decal - Mode
5. Decal - Key Top Cover (OEM machines only)
6. Model Name Plate (OEM machines only)
7. Decal - Master Set (-27 models only)

3.3 INSTALLATION PROCEDURE



C223I500.PCX

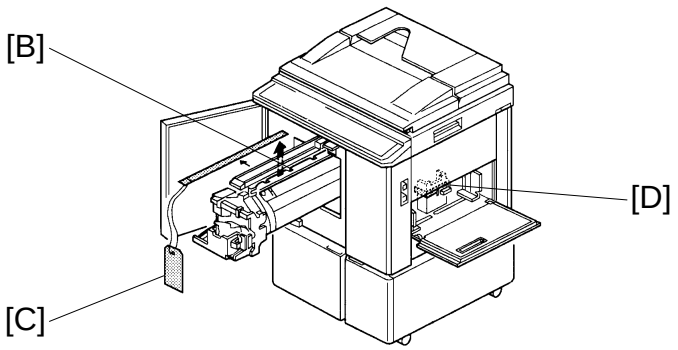


C223I501.PCX

⚠CAUTION

Do not hold the scanner unit when pushing the machine or the scanner unit safety switch may be damaged.

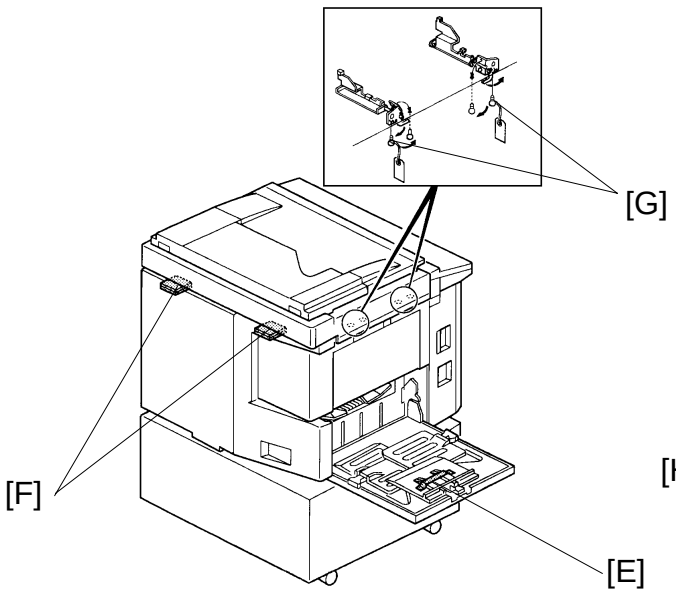
1. Place the machine on the table.
   NOTE: The screw holes in the bottom plate of the machine must line up with the screw holes in the table.
2. Remove the strips of tape [A] securing the covers and units shown above.



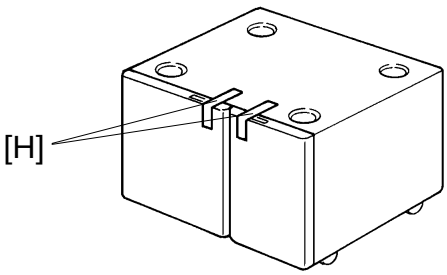
C223I502.PCX

3. Open the front door and slide out the drum unit [B].
4. Open the master clamper and remove the clamp [C].
5. Open the paper feed table and remove the cardboard cover [D] protecting the paper feed roller.

6. Slide the scanner unit to the left (as seen from the operation side) and remove the two strips of tape securing the master box.

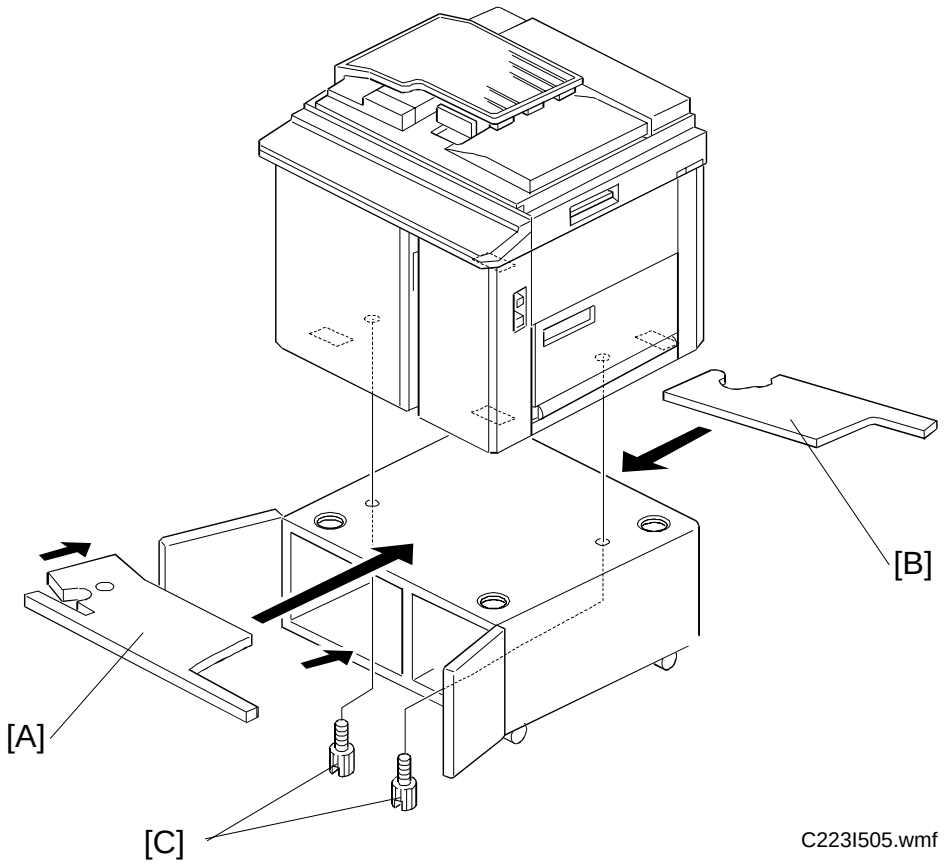


C223I503.PCX



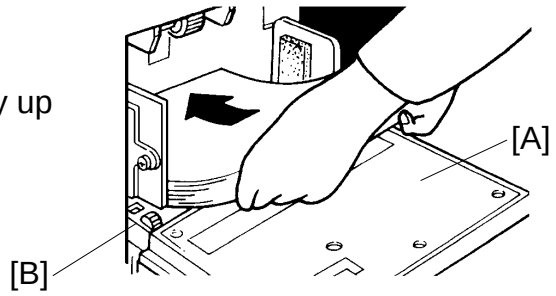
C223I504.PCX

7. Open the paper delivery table and remove the strip of tape [E] protecting the end fence.
8. Remove the cardboard [F] under the scanner unit.
9. Open the scanner unit and change the position of screws [G] from the transport position to the operating position.
10. Open the doors (2 strips of tape [H]) of the optional table and take out the plastic bag containing 2 screws.



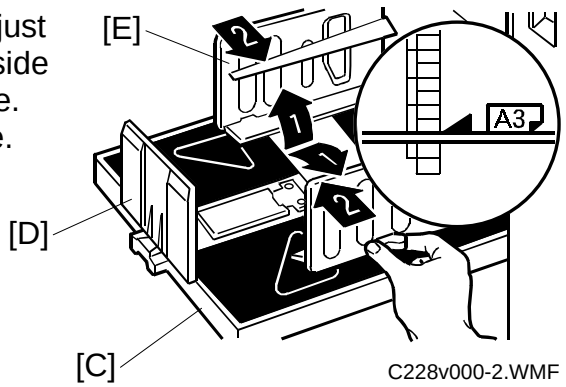
11. Raise the front side of the machine and position the base pad [A] under the machine. Then raise the rear side of the machine and position the other base pad [B] under the machine.
12. Secure the machine to the table with the two screws [C] packed with the table.

13. Open the paper feed table [A] and neatly stack some printing paper on the table.
14. Slide the paper feed side plates [B] gently up against the paper stack.



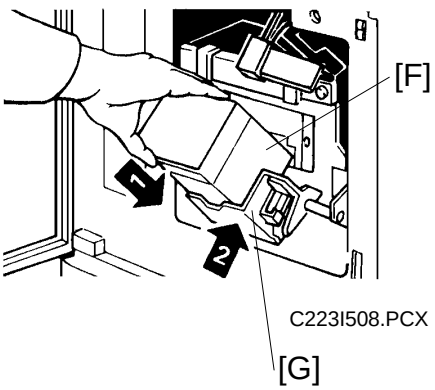
C223I506.PCX

15. Open the paper delivery table [C] and adjust the position of the end plate [D] and the side plates [E] to match the printing paper size. Refer to the paper size scale on the table.



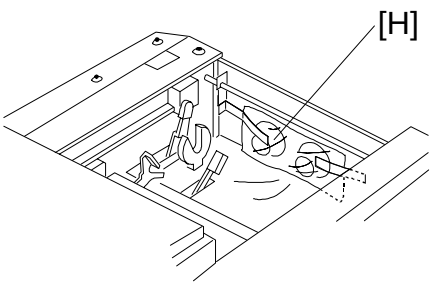
C228v000-2.WMF

16. Install the ink cartridge [F].
    1) Open the front door and lower the ink holder [G].
    2) Remove the ink cartridge cap.
    3) Insert the ink cartridge in the ink holder and raise the ink holder to the original position.
    4) Close the front door.



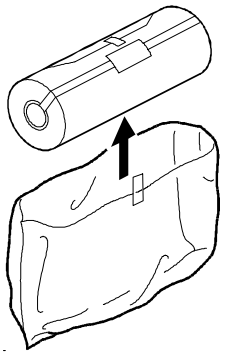
C223I508.PCX

17. Slide the scanner unit all the way to the left, and take the master spools [H] out.



C223I514.wmf

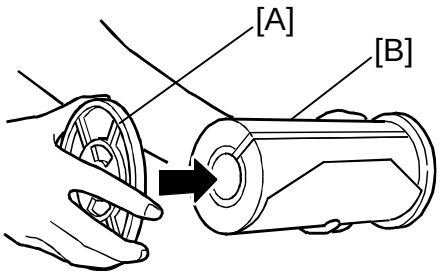
18. Install the master roll.
    1) Take out the master roll from the plastic bag.



C228I500.WMF

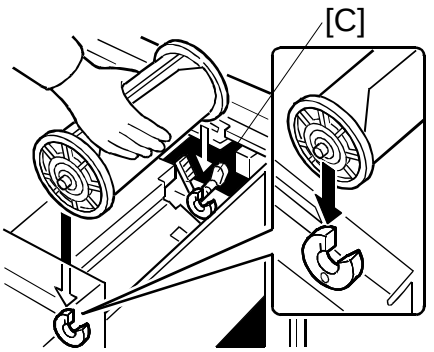
NOTE:
- Firmly grasp the master roll since it is very slippery.
- Do not remove the strip of the tape holding the master roll till step 5 below.

    2) Attach a spool [A] to each end of the master roll [B].



C228V002-2.WMF

    3) Push the pressure release lever [C] to the left.
    4) Set the master roll in the machine as shown in the illustration.

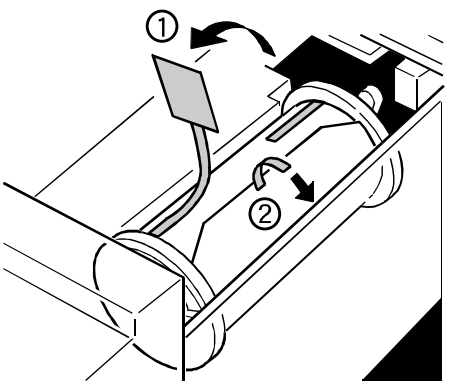


C228I501.PCX

    5) Remove the tape holding the master roll as shown to the right.

NOTE:
- Hold the spools by hand to remove the tape easier.
- It is better to remove the tape completely, but leave any parts that remain on the spools or in the core.

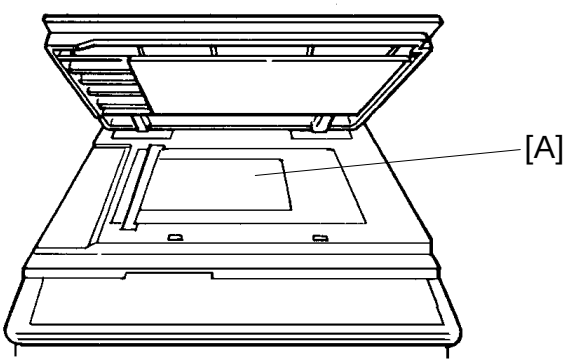
    6) Insert the leading edge of the master roll under the platen roller.
    7) Return the pressure release lever to the original position.
    8) Plug in the power cord and turn on the main switch.
    9) Press the master cut button.
    10) Open the master box cover and remove the cut strip of master paper.



C228I502.WMF

NOTE: Check that the paper on the master roll is not bent or creased.

    11) Close the scanner unit.



C223I512.PCX

19. Idle the machine to distribute ink on the drum.
    1) Press the Reset key while holding down the "0" key on the operation panel.
    2) If blinks on the operation panel when the machine stops, press the Reset key again.
20. Make some test prints to check the machine.
    1) Raise the platen cover and place an original face down on the exposure glass [A]. Make sure the original is flush with the left scale and aligned with the proper paper size marks.
    2) Press the Master Making key.
    3) Select the lowest print speed (1) with the Speed key and press the Print Start key. Make prints at this speed until the print image density stabilizes.

NOTE: 1) Usually, about 30 prints need to be made before the image fully stabilizes.
2) Check the image quality after the print image density is stabilized.

21. If necessary, change the language for the LCD guidance as follows:
    1) Turn the main switch off and unplug the machine.
    2) Remove the right front cover (4 screws).
    3) Change the DIPSW 102-1, 2, 3 settings. The following table shows the setting for each language.

DPS102			LCD Display
1	**2**	**3**	
ON	ON	OFF	English (Default)
OFF	OFF	ON	German
ON	OFF	ON	French
OFF	ON	ON	Spanish
ON	ON	ON	Italian

    4) Reinstall the right front cover (4 screws).

SECTION 4
SERVICE TABLES

4. SERVICE TABLES

4.1 SERVICE REMARKS

1. If a circuit breaker or a fuse opens, check and remove the cause of the overcurrent before resetting the breaker or replacing the fuse.
2. If the thermal head or the power supply unit is replaced, thermal head voltage adjustment is required.
3. Do not touch the edge of the cutter blade with bare hands.
4. Be careful not to drop the master eject unit when removing the eject unit guide shaft.
5. If the paper feed guide plate is removed, make sure that the guide plates do not touch the lower second feed roller when putting back the guide.
6. When putting back the lower separation roller, make sure that the front and rear separation levers move smoothly.
7. If the slowest speed is faster than 60 rpm, the sorter cannot keep up with the machine and a TS sorter jam might occur.
8. Do not energize the master feed and master eject clamper solenoids for longer than 10 seconds.
9. When adjusting the ink roller gap, check the gap at the right, center, and left positions.
10. The ink detection adjustment should be made under normal conditions (20 C/65%RH).
11. When removing the pressure cam drive gear, do not loosen the two deeply recessed bolts.
12. If the main drive belt has been removed, check the relationships between the drum drive gear, printing pressure cam, and the paper feed cams after replacing the belt. Adjust if necessary.
13. Do not keep on pressing the Image Position key if the image position sensor is broken or removed. The plastic gears between the metal gears may break.

4.2 SERVICE TABLES

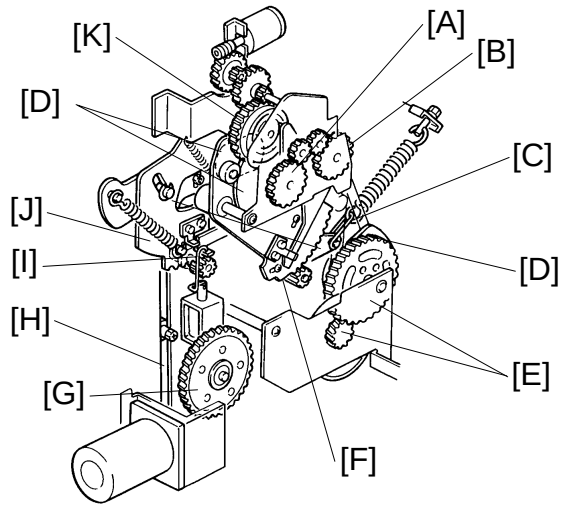
4.2.1 MAINTENANCE TABLES

Lubrication Points

Lubricate after removing adhering ink and paper dust at yearly intervals.

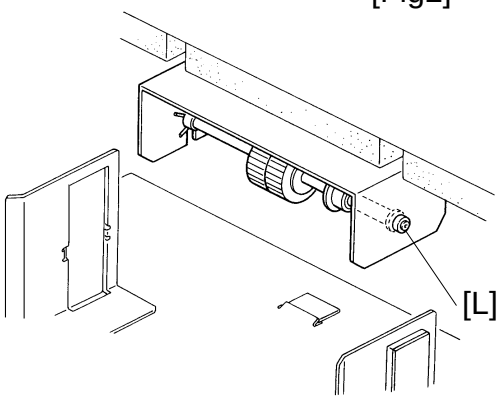
Section	Lubrication Point	Type	Location
Drive	Speed Reduction Gears of the Main Motor	Grease (Shell Albania No.2)	(Fig.1- E)
	Gears of the Drum Drive Shaft		On the inside and outside of the frame (Fig.1- B)
Image Positioning	Spiral Track of the Cam Gear		(Fig.1- K)
Paper Feed	Paper Feed Sector Gear		(Fig.1- J)
	Second Feed Sector Gear		(Fig.1- F)
	Gear of the Paper Feed Cam Shaft		(Fig.1- A)
	Paper Table Slide Groove		Both front and rear (Fig.1- H)
	Paper Table Drive Gear		(Fig.1- G)
	Bearings for the Upper Separation Roller Shaft	Motor oil (SAE No.20)	(Fig.1- I)
	Bearings for the Paper Feed Roller Shaft		(Fig.2- L)
Drum	Drum Drive Gear	Grease (Shell Albania No. 2)	(Fig.3- N)
	Master Clamper Sector Gear		(Fig.3- O)
	Master Clamper Pinion Gear		(Fig.3- P)
	Ink Pump Drive Gear		(Fig.3- M)
Printing Pressure	Between Printing Pressure Arm [Q] and Printing Pressure Stay [Q']		Both front and rear (Fig.4- Q)
	Pressure Spring Link		(Fig.1- C)
Master Eject	Master Pressure Plate Grooves	Grease (Shell Albania No. 2)	Both front and rear (Fig.5- S)
	Rounded Ends of the Master Pressure Plate Drive Arms		(Fig.5- R)
Paper Exit	Air Pump Drive Gears		(Fig. 6-T)
	Inside of the Air Pump Piston	Grease (Mobil Ep-1)	(Fig. 6-U)
ADF	Bearings for the Feed Roller Shaft	Motor oil (SAE No. 20)	Both front and rear (Fig. 7-V)
Others	Edge of Each Cam	Grease (Shell Albania No. 2)	(Fig.1- D)

[Fig1]



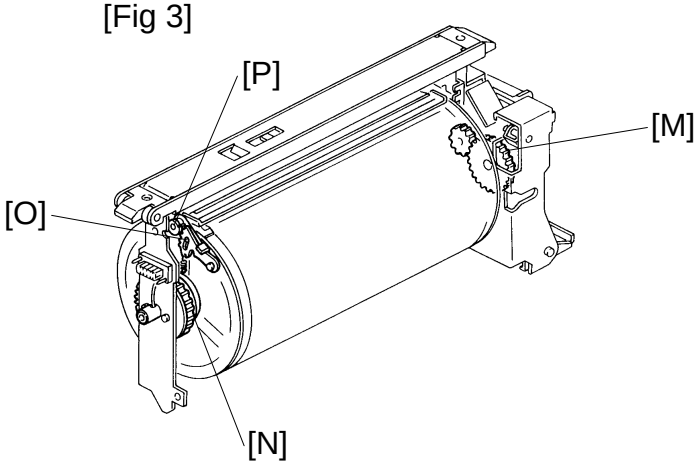
C223M500.PCX

[Fig2]



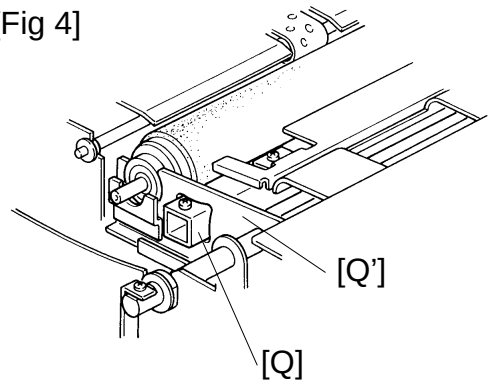
C223M501.PCX

[Fig 3]



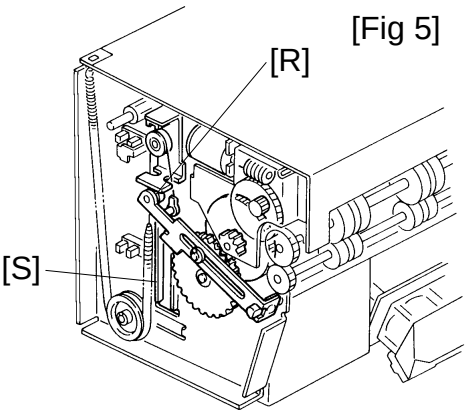
C223M502.PCX

[Fig 4]



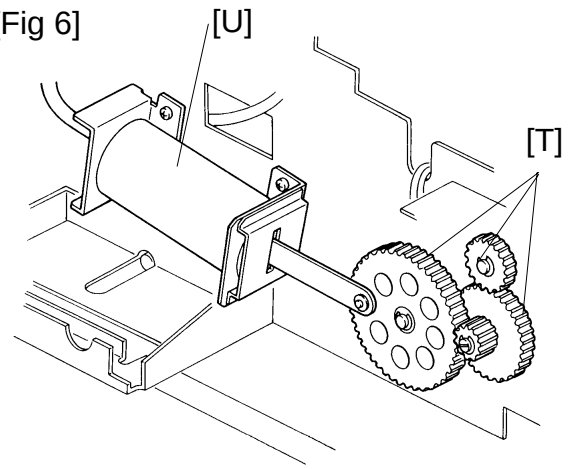
C223M503.PCX

[Fig 5]



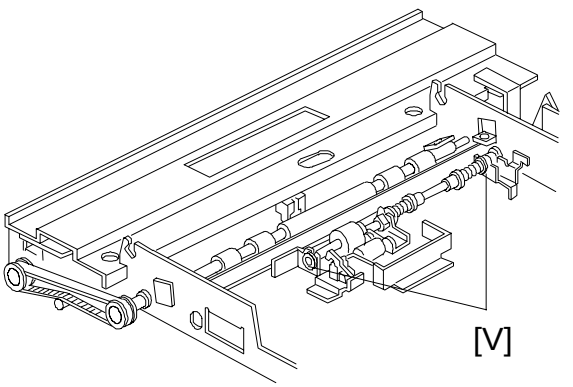
C223M504.PCX

[Fig 6]



C223M509.PCX

[Fig 7]



C223M510.WMF

User's Maintenance

Advise the customer to clean each item regularly. Clean the following items at every EM call if necessary.

Section	Cleaning Point	Cleaner	Interval
Optics	Original Platen Cover	Cloth and water	At every EM call
	Exposure Glass	Cloth and glass cleaner	
Paper Feed	Paper Feed Roller	Cloth and soap and water	
	Paper End Sensor	Dry cloth	
	Paper Length Sensor		
Printing	Press Roller	Cloth and soap and water	
ADF	Original Feed Rollers		

Periodic Inspection (every 6 months)

Section	Item	Standard Procedure
Optics	Original Platen Cover	Wipe off stains using a soft cloth moistened with ethyl alcohol.
	Exposure Glass	Wipe with a dry cloth.
Paper Feed	Paper Feed Roller	Wipe off ink and paper powder using a cloth moistened with ethyl alcohol.
	Upper and Lower Second Feed Rollers	
	Upper and Lower Separation Rollers	
Printing	Press Roller	
ADF	Pick-up Roller Feed Roller Separation Roller	Wipe off paper powder using a cloth moistened with water.

Periodic Inspection (every 12 months)

Section	Item	Standard Procedure
Optics	Back side of the Exposure Glass	Wipe with a dry cloth.
	Mirrors	Use a blower brush.
	Xenon Lamps	Wipe with a dry cloth.
Master Eject	Upper and Lower Master Eject Rollers	Wipe off ink and paper powder using a cloth moistened with ethyl alcohol.
Drum	Inside and outside of the Drum	Wipe off built-up ink and paper powder using a cloth moistened with ethyl alcohol.
	Ink Holder	
Master Making	Platen Roller	Wipe off paper powder using a cloth moistened with water.
Others	First and Second Paper Exit Sensors Master Eject Sensor Drum Master Sensor	Check the performance of all the sensors. Remove stains from the sensors using a dry cloth.

4.2.2 SERVICE CALL CODES

Code	Problem	Possible Causes
Main Body		
E-01	Neither the right nor the left cutter switch turns off within 3 seconds of the cutter motor starting.	1) Drive wire cut 2) Drive section malfunction 3) Defective cutter switch
E-02	Malfunction in the paper table drive section. 1. The paper table lower limit sensor or paper table height sensor does not turn on within 7 seconds. 2. The LCT tray drive motor does not stop within 25 seconds. 3. The upper limit sensor does not turn or within 8 seconds after the LCT cassette bottom plate drive motor starts.	1) Drive worm gear broken 2) Mounting screw of the worm gear broken 3) No power supply
E-04	The temperature of the thermal head is greater than 54°C when the Master Making key is pressed	1) Excessive thermal head temperature 2) Thermistor short
E-05	Malfunction in the image shifting section.	1) Image position sensor connector disconnected 2) Defective image position sensor
E-06	The drum rotation sensor detects an incorrect motor speed.	1) Drum lock 2) No power supply
E-09	The signal level between CN104-A1 and GND is over 4.9 volts.	1) The thermistor is open.
E-10	The CPU detects an abnormality in the pulse signals from the image processing PCB. These pulses determine the energy to be applied to the thermal heating elements.	1) Defective thermistor 2) Related connectors are not.
E-11	Encoder output does not change within 3 seconds of the main switch being turned on or the Clear Mode key being pressed.	1) Defective image position motor 2) No power supply

Code	Problem	Possible Causes
E-12	1. The upper or lower pressure plate sensor remains activated for more than 4 seconds after the pressure plate motor starts turning. 2. The lower pressure plate sensor is not activated within 8 seconds of the pressure plate motor starting to turn even though the upper pressure plate sensor is de-activated. 3. The upper pressure plate sensor is not activated for more than 8 seconds after the pressure plate motor starts to turn even though the lower pressure plate sensor is de-activated.	Pressure plate drive mechanism malfunction.
E-13	1. During scanner initialization: – The home position sensor remains activated for more than 4 seconds. – The home position sensor is not activated within 2 seconds. 2. The home position sensor is not activated within 7 seconds when the scanner returns after finishing making the master or scanning.	1) Defective home position sensor 2) Scanner motor lock
E-14	EMF sorter communication error.	
Sorters		
E-21	The 1st transport motor speed is abnormal.	1) Defective 1st transport motor 2) Defective 1st transport motor rotation sensor.
E-26	The 1st sorter helical wheel H.P. sensor status does not change even if the bin shift motor drive signal is applied. The bin shift motor rotation sensor status does not change even if the bin shift motor drive signal is applied.	1) Defective bin shift motor 2) Defective helical wheel H.P. sensor 3) Defective bin shift motor rotation sensor
E-27	The 1st sorter jogger bar H.P. sensor status does not change even if the jogger bar motor drive signal is applied.	1) Defective jogger bar motor 2) Defective jogger bar H.P. sensor

Code	Problem	Possible Causes
E-28	The 1st sorter staple position switch or staple unit movement switch status does not change even if the staple unit shift motor drive signal is applied.	1) Defective staple unit shift motor 2) Defective jogger bar H.P. sensor 3) Defective staple unit movement switch
E-29	The 1st transport sort mode position sensor or the 1st transport non-sort mode position sensor status does not change even if the delivery table motor drive signal is applied.	1) Defective 1st transport sort mode position sensor 2) Defective 1st transport non-sort position sensor 3) Defective delivery table motor
E-34	The 2nd transport motor rotation sensor speed is abnormal.	1) Defective 2nd transport motor 2) Defective 2nd transport motor rotation sensor
E-36	The 2nd sorter helical wheel H.P. sensor status does not change even if the bin shift motor drive signal is applied. The bin shift motor rotation sensor status does not change even if the bin shift motor drive signal is applied.	1) Defective bin shift motor 2) Defective helical wheel H.P. sensor 3) Defective bin shift motor rotation sensor
E-37	The 2nd sorter jogger bar H.P. sensor status does not change even if the jogger bar motor drive signal is applied.	1) Defective jogger bar motor 2) Defective jogger bar H.P. sensor
E-38	The 2nd sorter staple position sensor or staple unit movement sensor status does not change even if the staple unit shift motor drive signal is applied.	1) Defective staple unit shift motor 2) Defective jogger bar H.P. sensor 3) Defective staple unit movement switch

4.2.3 DIP SWITCHES, LEDS, VRS, TPS (ON THE MAIN CONTROL PCB)

DIP Switches

DIP Switch	Function	Remarks
DIP SW101	Do not use.	Must be off at all times.

DPS 102			LCD Display
1	2	3	
ON	ON	OFF	English
OFF	OFF	ON	German
ON	OFF	ON	French
OFF	ON	ON	Spanish
ON	ON	ON	Italian
OFF	OFF	OFF	For Japanese Machines
ON	OFF	OFF	
OFF	ON	OFF	

DPS 102	ON	OFF
4	DFII (Type 50) Also see SP8.	DFI
5	Print and master counters increment by two counts when the A3 drum is used (NRG setting). Also, see SP86.	Print and master counters increment by one regardless of the drum size.
6	Inch version	A4 version

NOTE: The DF setting can be changed using SP8. When the memory clear (SP60) is performed, the SP8 setting depends on the DPS102-4 setting. Later, if the SP mode is changed but not the DPS, the SP mode setting takes priority. This note also applies to DPS 102-5.

Photodiodes

LED	Component	Remarks
LED101	1st Paper Exit Sensor	When paper is detected, the LED lights.
LED102	Drum Master Sensor	When a master is on the drum, the LED lights.
LED103	2nd Paper Exit Sensor	When paper is detected, the LED lights.
LED104	Master Eject Sensor	When a master is under the master eject sensor, the LED lights.
LED105	Ink Detection	When ink is present, the LED lights.
LED106	Main Motor	When the main motor turns on, the LED lights.

VRs

VR	Function
VR101	1st Paper Exit Sensor Adjustment
VR102	Drum Master Sensor Adjustment
VR103	2nd Paper Exit Sensor Adjustment
VR104	Master Eject Sensor Adjustment
VR105	Adjustment for Drum Speed 5 (120 rpm)
VR106	Adjustment for Drum Speed 1 (60 rpm)

TPs

TP	Function
TP101	1st Paper Exit Sensor Voltage
TP102	Drum Master Sensor Voltage
TP103	2nd Paper Exit Sensor Voltage
TP104	Master Eject Sensor Voltage
TP105	Ink Detection Voltage
TP106	Drum Rotation Sensor Voltage
TP107	GND

4.2.4 EXPECTED LIFE OF PARTS

Section	Part Description	Expected Life
Scanner	Xenon Lamp	15,000 originals
Master Feed/Master Making	Thermal Head Reverse Roller	30,000 masters 30,000 masters
	Platen Roller	30,000 masters
	Upper Master Feed Roller	1 year or 30,000 masters
Drum	Drum Cloth Screen	2 years or 1,200,000 prints
Paper Feed	Paper Feed Rubber Side Plate	2 years or 1,200,000 prints
	Paper Feed Roller	6 months or 300,000 prints
	Upper Separation Roller	1 year or 600,000 prints
	Lower Separation Roller	2,000,000 prints
	2nd Feed Roller Brake Belt	1,000,000 prints
	2nd Feed Roller Gear	1,000,000 prints
	Separation Plate	1 year or 600,000 prints
Printing	Press Roller	2 years or 1,200,000 prints
Delivery	Transport Belt	2 years or 1,200,000 prints

4.2.5 SPECIAL TOOLS

Description	Part Number
Test Chart R-21	99992131
Resolution Chart	A0129110
Drum Gauge	C2009001
Image Shifting Gauge	C2009002

4.3 SERVICE PROGRAM MODE

4.3.1 SERVICE PROGRAM MODE OPERATION

The service program (SP) mode is used to check electrical data, change modes, or change adjustment values.

Service Program Mode Access Procedure (for engineers)

All service program modes can be accessed with this procedure.

1. Press the following keys on the operation panel in the following order:
   Case 1:
   a) Clear Modes key
   b) Clear key
   c) Combine 2 Originals key
   d) Enter key

   Case 2:
   a) Turn off the power switch
   b) Press the Enter key, Stop key, and Clear key simultaneously
   c) Turn on the power
2. The following is displayed on the LCD when the SP mode is accessed.

SP—MODE
PROGRAM No. 0

3. Using the number keys, enter the desired SP mode number (listed in the service program table.)
   NOTE: The SP mode number can be shifted up or down by pressing the Zoom key ("+" or "-").

4. To cancel the SP mode, press the Clear Modes key.

Service Program Mode Access Procedure (for users)

This procedure allows users to access only the service program modes that are marked with an asterisk in the service program table.

1. Press the following keys on the operation panel in the following order:
   a) Clear Modes key
   b) Clear key
   c) Enter key
2. The following is displayed on the LCD when the SP mode is accessed.

SP—MODE
PROGRAM No. 0

3. Using the number keys, enter the desired SP mode number (listed in the service program table).
4. To cancel the SP mode, press the Clear Modes key.

Change Adjustment Values or Modes

1. After entering the desired SP mode number, press the Enter key. The current value or mode will be displayed on the LCD (at the end of the second line).
2. Enter the desired value or mode using the number keys (listed in the service program table).
   Use the Memory/Class key to toggle between + and -.
3. Press the Enter key to store the desired value or mode.
4. To cancel the SP mode, press the Clear Modes key.

4.3.2 SERVICE PROGRAM TABLE

*: Accessible by a customer<_>**: Can be registered in CS mode
♥: A4 version ♦: LT version

No.	Display	Function	Data	Factory Setting	Comments
1	On line	Enables On Line key operation.	0: No 1: Yes	0	
2	FDC Type 10	Used only in Japan	0: No 1: Yes	0	Keep at 0.
3	Key Counter	Enables key counter operation.	0: No 1: Yes	0	
4	Key Card	Used only in Japan.	0: No 1: Yes	0	
5	EMF Sorter	Selects the number of sorters.	0: No sorters 1, 2, 3, 4, or 5: Sorters present	0	Input 1 to 5 to indicate the number of sorters.
7-1	DS/TS Sorter	Enables TS20A/B operation.	0: No 1: Yes	0	If "1" is selected in 7-1, the machine goes to Auto Reset Time setting mode.
7-2	Auto Reset Time	Specifies the auto reset time.	0: No 1-5: min.	0	
8	ADF Select	Informs the machine if DF Unit Type 50 is installed.	0: DF1 (or no DF) 1: DF2 (type 50)	0	
*10.	Min. Print	Limits the minimum print quantity that can be entered.	0 to 9999	0	
*11	Max. Print	Limits the maximum print quantity that can be entered.	0 to 9999	9999	
*12	♥: A4 → A3 Mag. Ratio ♦: HLT → LG Mag. Ratio	Adjusts the fixed magnification ratio. ♥: From A4 to A3 ♦: From 51/2" x 81/2" to 81/2" x 14"	50 to 200%	♥: 141% ♦: 155%	
*13	♥: A4 → B4 Mag. Ratio ♦: LT → DLT Mag. Ratio	Adjusts the fixed magnification ratio. ♥: From A4 to B4 ♦: From 51/2" x 81/2" to 11" x 17"	50 to 200%	♥: 122% ♦: 129%	
*14	♥: B4 → A3 Mag. Ratio ♦: LG → DLT Mag. Ratio	Adjusts the fixed magnification ratio. ♥: From B4 to A3 ♦: From 81/2" x 14" to 11" x 17"	50 to 200%	♥: 115% ♦: 121%	
*15	Full Size	Adjusts the full size magnification ratio.	50 to 200%	100%	

No.	Display	Function	Data	Factory Setting	Comments
*16	Page Margin	Adjusts the create margin magnification ratio.	50 to 200%	93%	
*17	♥: A3 → B4 Mag. Ratio ♦: LG → LT Mag. Ratio	Adjusts the fixed magnification ratio. ♥: From A3 to B4 ♦: From 81/2" x 14" to 81/2" x 11"	50 to 200%	♥: 87% ♦: 77%	
*18	♥: B4 → A4 Mag. Ratio ♦: ** → LT Mag. Ratio	Adjusts the fixed magnification ratio. ♥: From B4 to A4 ♦: From 11" x 15" to 81/2" x 11"	50 to 200%	♥: 82% ♦: 74%	
*19	♥: A3 → A4 Mag. Ratio ♦: DLT → LT Mag. Ratio	Adjusts the fixed magnification ratio. ♥: From A3 to A4 ♦: From 11" x 17" to 81/2" x 11"	50 to 200%	♥: 71% ♦: 65%	
*20	Buzzer On	Turns the beeper ON or OFF	0: No 1: Yes	0	
*21	Prints/Master Cost	Adjusts the cost ratio of masters to prints for accounting purposes.	0 to 50	0	The set number (0 to 50) is automatically added to the key counter each time a master is used.
22	Read Image Area	Not used	-	0	Not used
*23	Online Paper Size	Used only in Japan	0: A6 1: A5	0	Not used
25	Sorter Feed Speed	Determines the transport belt speed in the TS sorter.	0: -20% 1: -15% 2: -10% 3: -5% 4: +5% 5: +10% 6: +15% 7: +20% 8: +25% 9: +30% 10: 0%	10	
26-1	Sorter Priority	Determines the sorter priority.	0: Normal 1: Others	0	
26-2	0: 1st/2nd 1: 2nd/1st 2. 1st 3. 2nd	Determines the sorter priority when "1" is selected in SP26-1.	0: 1st sorter first 1: 2nd sorter first 2: 1st sorter only 3: 2nd sorter only	0	If "2" or "3" is selected, only one sorter is used.

No.	Display	Function	Data	Factory Setting	Comments
27	Auto Staple Off	Specifies whether the staple unit is disabled.	0: Staple mode enabled. 1: Staple mode disabled.	0	
28	Max. Print/Bin	Specifies the sort/stack number limit.	1 to 50 sheets	50	
**29	Pht Bckgrnd Correct	Determines whether the original background correction is done in Photo mode.	0: Correction is not done. 1: Correction is done.	0	
30	Sub Scan Mag. Adjust	Adjusts the sub-scan magnification.	-1.9 to +1.9%	(0)	The factory setting depends on the machine.
31	MTF Level	Adjusts the MTF level.	0: Low 1: Standard 2: High 3: Maximum	1	
32	Image Density Rank	In line mode, adjusts the image density level.	0: Light 1: Standard 2: Dark	1	
33	Lead Edge Margin	Adjusts the lead edge margin.	4 to 10 mm	5 mm	
34	Line/Pht Mode Level	Use to adjust the threshold level for separating line areas and photo areas in the Line/Photo mode.	0: Change the threshold setting 1: Returns the setting to default	0	If "0" is selected in this mode, the machine goes to 34-1.
34-1	Contrast	Select the contrast setting for changing the threshold for line and photo.	0: Standard 1: Light 2: Dark		Depending on the number selected in this mode, the machine goes to 34-1-0, 34-1-2, or 34-1-3.
34-1-0	Std (setting for the Standard tone)	Adjust the threshold level to distinguish line and photo areas for the Standard tone setting in the Line/Photo mode. There are four numbers and each represents the threshold value for an image density. Input the required value for the one that is blinking, then press Enter to move the next one.	Lt: 0 to 63 Std: 0 to 63 Dk: 0 to 63 Dkr: 0 to 63	Lt: 18 Std: 16 Dk: 22 Dkr: 22	If "0" is selected in 34-1, the machine goes to this mode.

No.	Display	Function	Data	Factory Setting	Comments
34-1-1	Lt (setting for the Light tone)	Adjust the threshold level to distinguish line and photo areas for the Light tone setting in the Line/Photo mode.	Lt: 0 to 63 Std: 0 to 63 Dk: 0 to 63 Dkr: 0 to 63	Lt: 16 Std: 14 Dk: 14 Dkr: 14	
34-1-2	Dk (setting for the Dark tone)	Adjust the threshold level to distinguish line and photo areas for the Dark tone setting in the Line/Photo mode.	Lt: 0 to 63 Std: 0 to 63 Dk: 0 to 63 Dkr: 0 to 63	Lt: 8 Std: 10 Dk: 14 Dkr: 14	
35	Head Energy Adjust	Selects normal mode or Economy mode for changing the thermal head energy.	0: Normal mode 1: Economy mode		Depending on the number selected in this mode, the machine goes to 35-1 or 35-2.
35-1	Head Energy Adjust (Normal)	Adjusts the thermal head energy for the normal mode.	0 to -99 (%)	7	
35-2	Head Energy Adjust (Economy)	Adjusts the thermal head energy for the Economy mode.	0 to -99 (%)	30	
36	Sub Scan Mag. Adjust (ADF)	Adjusts the ADF sub-scan magnification.	-1.9 to 1.9 %	0	0.1 % steps
37	Shadow Erase Level	Selects the image mode for adjusting the threshold level for shadow erase.	0: Line 1: Photo 2: Returns the settings to the defaults		If "0" or "1" is selected in this mode, the machine goes to 37-0 or 37-1.
37-0	Line	Adjusts the shadow erase threshold level for Line mode. There are four numbers and each represents the threshold value for an image density. Input the required value for the one that is blinking, then press Enter to move the next one.	Lt: 0 to 63 Std: 0 to 63 Dk: 0 to 63 Dkr: 0 to 63	Lt: 27 Std: 19 Dk: 15 Dkr: 10	
37-1	Contrast (Photo)	Selects the contrast setting for adjusting the threshold level for shadow erase in Photo mode.	0: Standard 1: Light 2:Dark		Depending on the number selected in this mode, the machine goes to 37-1-0, 37-1-1 or 37-1-2.

No.	Display	Function	Data	Factory Setting	Comments
37-1-0	Std (setting for the normal tone)	Adjusts the shadow erase threshold for the Normal contrast setting in Photo mode. There are four numbers and each represents the threshold value for an image density. Input the required value for the one that is blinking, then press Enter to move the next one.	Lt: 0 to 63 Std: 0 to 63 Dk: 0 to 63 Dkr: 0 to 63	Lt: 24 Std: 15 Dk: 11 Dkr: 4	
37-1-1	Lt (setting for the light tone)	Adjusts the shadow erase threshold for the Light Tone contrast setting in Photo mode.	Lt: 0 to 63 Std: 0 to 63 Dk: 0 to 63 Dkr: 0 to 63	Lt: 31 Std: 24 Dk: 15 Dkr: 9	
37-1-2	Dk (setting for the dark tone)	Adjusts the threshold value for shadow erase of the Dark tone contrast in Photo mode.	Lt: 0 to 63 Std: 0 to 63 Dk: 0 to 63 Dkr: 0 to 63	Lt: 12 Std: 7 Dk: 5 Dkr: 2	
38	ADF Scan Line Adjust	Adjusts the ADF scanning start position.	-4.9 to 4.9 mm	0	0.1 mm steps See remarks (1).
39	Image Center Adjustment	Adjusts the center position of copies in the ADF and platen modes.	0: Scanner 1: ADF	0	See remarks (2).
39-0	Image Center Adjustment: Scanner	Adjusts the center position of copies in platen mode.	-4.9 to 4.9 mm	0	0.1 mm steps
39-1	Image Center Adjustment: ADF	Adjusts the center position of copies in ADF mode.	-4.9 to 4.9 mm	0	0.1 mm steps
*40	Original	Specifies the image mode at power-up.	0: Photo 1: Line 2: Line/Photo	1	
*41	Image Density	Specifies the image density at power-up.	0: Light 1: Standard 2: Dark 3: Darker	1	
42	Print Speed	Specifies the printing speed at power-up.	0: 60 rpm 1: 75 rpm 2: 90 rpm 3: 105 rpm 4: 120 rpm	2	
*43	Auto Cycle Mode	Specifies whether Auto Cycle mode is selected at power-up.	0: No 1: Yes	0	

No.	Display	Function	Data	Factory Setting	Comments
*44	Memory/Class Mode	Specifies the initial job memory feature (Memory or Class mode) at power-up.	0: Class 1: Memory	1	
45	Std. Image Position	Specifies the image position at power-up	1: +15 mm 2: +10 mm 3: +5 mm 4: 0 mm 5: -5 mm 6: -10 mm 7: -15 mm 8: -20 mm	4	
*46	Make Up	Specifies the initial make-up background pattern when the Image Make-up mode is selected.	1 to 40 51 to 90 101 to 140 151 to 190	0	0: No background pattern is selected.
47	Contrast	Specifies the initial contrast when the Photo mode is selected.	0: Standard 1: Light 2: Dark	0	
48	Photo	Specifies the initial screen when the Photo mode is selected.	0: Standard 1: Fine 2: Coarse	0	
*50	Directional Mag. Mode	Selects which is used to input directional magnifications: reproduction ratios or vertical and horizontal lengths.	0: Reproduction ratios 1: Vertical and horizontal lengths	0	
*51	Clear Multi Copy	Resets the Combine 2 originals or Combined Print function (if it has been set) after the master making process.	0: No 1: Yes	0	
52	Compress W Start Key	The master compression for the master eject box is carried out always when the Master Making key is pressed.	0: No 1: Yes	0	This mode is to reduce the possibility of slipping off the eject belts.
60	Clear All Memory	Returns all SP modes to the default settings.	0: No 1: Yes	0	
61	Clear Memory / Except SP 30, 36, 38, 39	Returns all SP modes to the default settings except for SP No. 30, 36, 38 and 39	0: No 1: Yes	0	
70	Original Feed Jam (A)	Displays the total number of original jams.		0	

No.	Display	Function	Data	Factory Setting	Comments
71	Paper Feed Jam (B)	Displays the total number of paper feed jams.		0	
72	Paper Wrap Jam (E)/(B)(E)	Displays the total number of times that paper has accidentally wrapped around the drum.		0	
73	Paper Delivery Jam (G)	Displays the total number of paper delivery jams.		0	
74	Master Feed Jam (C)	Displays the total number of master feed jams.		0	
75	Master Delivery Jam (F)	Displays the total number of master delivery jams.		0	
76	Clear Jam Counters	Clears all jam counters.	0: No 1: Yes	0	
77	Last Sorter Jam	Displays the jam code for the last sorter jam.			
**78-1	Letter/Pht Mode [CS]	Select if letter images is to be emphasized in Letter/Photo mode.	0: Standard 1:Emphasize	0	
78-2	Clear/Original	Select if the image mode (letter, photo, or letter/photo) is to be returned to the default setting when finishing the master making.	0: No 1: Yes	0	
**79	Eco/Quality Start	Specifies if Quality Start operation is done for every master making.	0: No 1: Yes	0	If "1" is selected in 79, the machine goes to 79-1.
79-1	Idling Number	Specifies the number of drum rotations for Quality Start.	0 to 10	2	If "0" is selected in SP79, the number of rotations is determined by SP80.

No.	Display	Function	Data	Factory Setting	Comments
*80	Auto Eco/Q Start	Specifies whether Quality Start is done or not. If "Yes" is selected, the machine goes to "Idling No." mode. The idling number can be selected separately corresponding to the machine off time; 0 to 6 hours, 6 to 32 hours, and more than 32 hours.	0: No 1: Yes	1	If "1" is selected in 80, the machine goes to 80-1.
80-1-1	Idling Number (after a 0 to 6 hour interval)	Specifies the drum rotation number for the machine off time 0 to 6 hours.	0 to 10	0	If Enter key is pressed in this mode, the machine goes to 80-1-2.
80-1-2	Idling Number (after a 6 to 32 hour interval)	Specifies the drum rotation number for when the machine was off from 6 to 32 hours.	0 to 10	2	If Enter key is pressed in this mode, the machine goes to 80-1-3.
80-1-3	Idling Number (after an intermal of more than 32 hours)	Specifies the drum rotation number for when the machine was off from more than 32 hours.	0 to 10	3	
81	Proof Print No.	Specifies how many trial prints are made after making the master.	0 to 2 sheets	1	
*82-1	Skip Feed No.	Selects the feed interval.	1 to 9	2	1: Normal operation 2 to 9: One sheet fed every two to nine drum rotations
82-2	Long Sheet ?	Specifies whether a long sheet is used. (If "Yes" is selected, paper exit jam detection is not done.)	0: No 1: Yes	0	Displays only when no. 2 to 9 are selected in 82-1.
*83	Auto Reset Time	Specifies the auto reset time.	0: No 1 to 5 min.	0	
**84	Auto Multi-copy	Specifies the initial mode for Multi copy.	0: Normal 1: Auto (Two or four identical images are made if the Master Making key is pressed once.)	0	

No.	Display	Function	Data	Factory Setting	Comments
85	Initial Compression	Specifies whether full master box detection is made at power-up.	0: No 1: Yes	0	
86	A3 Drum 2 Count Up	Specifies whether the counter increments by two counts per print when the A3 drum is used.	0: No 1: Only the master counter 2: Both the master and the copy counter	0 Ricoh, AB Dick 2 NRG	See Remarks (3)
**87	Memory Print	Specifies the printing operation when in Memory mode.	0: Memory 1: Stack	0	See Remarks (4).
**88	Auto Memory/ Class	Specifies whether Auto Memory/Class mode is used.	0: No 1: Yes	1	See Remarks (5).
**89	Gray/Tint Mode	Select "Yes" to make a "Tint" image. (If "Tint" mode is selected, the Screen, Contrast, and Image Density keys are not available.)	0: No 1: Yes	0	
90	Thermal Head Test	Selects the background pattern for the copy made in the thermal head test; performs the test.	1 to 40 51 to 90 101 to 140 151 to 190	7	See the Thermal Head Test section.
91	Command Sheet Check	Prints the command sheet image (designated area) together with the original image.	0: No 1: Yes	0	See the Command Sheet Check section.
92	Thermal Paper Mode	Use this mode to test the thermal head.	0: No 1: Yes	0	See Remarks (6)
93	Erase Area Check	Checks the erase area.	0: No 1: Yes	0	See Remarks (7)
95-1	Scanner Free Run	Selects the type of scanner free run.	0: With the lamp off 1: With the lamp on	0	See Remarks (8)
95-2	Scanner Free Run	Carries out the scanner free run. (The speed can be changed: see Remarks (8).)	Start with the Print Start key. Stop with the Stop key.		Displays when pressing # after selecting 0 or 1 in 95-1.
96	ADF Original Feed Check	Carries out the ADF original feed check. (The speed can be changed; see Remarks (9).)	Start with the Print Start key. Stop with the Stop key.		See Remarks (9)

No.	Display	Function	Data	Factory Setting	Comments
98	Economy Count	Displays the total number of masters made in Economy mode.		0	
99	Staple Count	Displays the total number of stapling operations done so far.		0	
100	Multi-copy Count	Displays the total number of masters made in Multi-copy mode.		0	
101	Make Up Count	Displays the total number of masters made in Make-up mode.		0	
102	Make Up Photo Count	Displays the total number of masters made in Make-up Photo mode.		0	
103	Margin Erase Count	Displays the total number of masters made with the Margin Erase key.		0	
104	On line Count	Displays the total number of masters made in On Line mode.		0	
105	Overlay Count	Displays the total number of masters made in Overlay mode.		0	
106	Enlarge Count	Displays the total number of masters made in Fixed Enlargement mode.		0	
107	Reduction Count	Displays the total number of masters made in Fixed Reduction mode.		0	
108	Zoom Count	Displays the total number of masters made in Zoom mode.		0	
109	Directional Mag.	Displays the total number of masters made in Directional Magnification mode.		0	
110	Power On Time	Displays the total amount of time the machine has been turned on.		0	xxxxx Hour xx Minutes xx Seconds

No.	Display	Function	Data	Factory Setting	Comments
111	Total Count	Displays the total number of masters and prints.		0	M: Master count P: Print count
*113	Resettable Count	Used by the customer to display the total number of masters and prints.		0	M: Master count P: Print count
*114	CLR Reset- table Count	Clears the resettable total master/print counters.	0: No 1: Yes	0	
115	ADF Mode Count	Displays the total number of sheets fed in the ADF mode.		0	
116	Scanner Mode Count	Displays the total number of originals set in platen mode.		0	
117	Color Drum Count	Displays the total number of prints when using the color drum.		0	
118	Paper Size Count	Displays the total number of prints made in each paper size. See Remarks (10).		0	Display counters for each paper size by pressing the # key.
119	CLR All Total Count	Clears the following counters: SP Nos. 111, 115, 116, 117, and 118.	0: No 1: Yes	0	
*120-1	User Code Mode	Selects user code mode, and displays the total number of prints made in the User Code mode.	0: No 1: Yes	0	See the user code mode section.
120-2	Auto Reset Time	Selects the auto reset time.	0: Unlimited 1: 3 min. 2: 5 min.	0	Displays only when "Yes" is selected in 120-1.
*121.	UC Count	Displays the total number of masters and prints made by each user code.		0	Press the # key to shift to another user code.
*122	Clear UC Count	Clears every user code counter.	0: No 1: Yes	0	Same as above.
*123	Total UC Count	Displays the total number of masters and prints for up to 20 user codes.		0	
*124	Clear Total UC Count	Clears the total user code counter.	0: No 1: Yes	0	
130	Input Check Mode	Displays the inputs from sensors and switches.			See the input check table.

No.	Display	Function	Data	Factory Setting	Comments
131	Output Check Mode	Turns on the electrical components.			See the output check table.
132	All Indicators ON	Turns on all the indicators on the operation panel.			Press the # key to light all the indicators.
133	Sorter Cleaning Mode	In this mode, one bin shift is carried out when the Print Start key is pressed. First, select the 1st sorter or 2nd sorter.	1: 1st Sorter 2: 2nd Sorter	1	Depending on the number selected in this mode, the machine goes to 133-1 or 133-2.
133-1	Sorter Cleaning Mode (1st Sorter)	1. When the Print Start key is pressed once, the bin returns to the home position. 2. Each time the Print Start key is pressed after this, one bin shift is carried out. When the 20th bin shift is done, the bins return to the home position.			
133-2	Sorter Cleaning Mode (2nd Sorter)	1.When the Print Start key is pressed once, the bin returns to the home position. 2. Each time the Print Start key is pressed after this, one bin shift is carried out. When the 20th bin shift is done, the bins return to the home position.			
135	SN: 1st Paper Exit	Displays the 1st paper exit sensor voltage.			Unit: Volts
136	SN: 2nd Paper Exit	Displays the 2nd paper exit sensor voltage.			Unit: Volts
137	SN: Master Eject	Displays the master eject sensor voltage.			Unit: Volts
138	SN: Drum Master	Displays the drum master sensor voltage.			Unit: Volts
140	Ink Detection	Specifies whether ink detection is done.	0: No 1: Yes	1	
141	Paper Detection	Specifies whether paper end detection is done.	0: No 1: Yes	1	
** 141-1	Size Detection	Specifies whether paper size detection is done or not.	0: Yes 1: No size detection	0	If "0" is selected in this mode, the machine goes to 142-2.

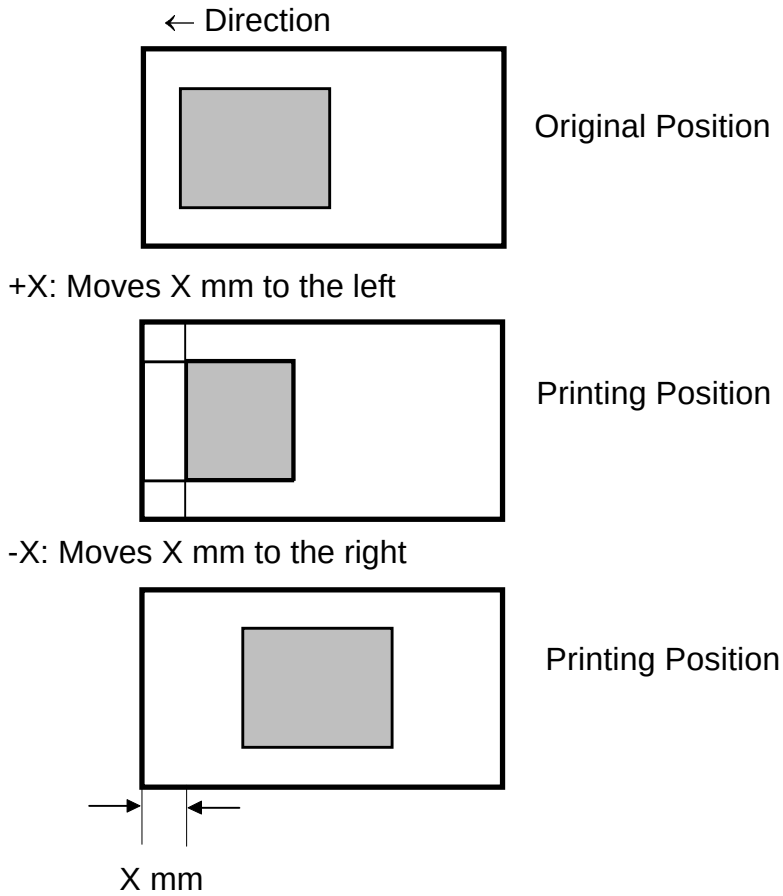
No.	Display	Function	Data	Factory Setting	Comments
141-2	Size Detection OFF?	Specifies whether the paper size indication on the operation panel is erased.	0: No 1: Yes	0	
*143	Orig. Size Detection	Specifies whether original size detection is done.	0: No 1: Yes	1	
145	Drum Mast. Detection	Specifies whether drum master detection is done.	0: No 1: Yes	1	
146	ADF Cover Detection	This mode disables the ADF Cover Sensor.	0: Disabled 1: Enabled	1	
147	Platen Set Detection	This mode disables the ADF Set Sensor.	0: Disabled (the ADF is always set) 1: Enabled	1	
150	Control ROM No.	Displays the ROM part number and the ROM manufacturing date.		P/No.	1994/10/07 = YYYY/MM/DD
151	Machine No.	Displays the machine serial number and the installation date.		0	Input the serial number and the installation date.
152	Service Tel. No.	Input the service representative's telephone number, which is displayed with the service call code.		0	Use the number keys to input the telephone number at installation. Press the Memory/ Class key if you wish to add a space between the digits.
153	Last Service Code	Displays the last service call.		0	
*160	♥: Margin Ers. A3 ❑ ♦: Margin Ers. 11x17❑	Adjust the margin erase area. ♥: A3 ♦: 11" x 17"	(50 to 307) x (50 to 432) mm	♥: 289 x 416mm ♦: 271 x 428mm	
*161	♥: Margin Ers. B4 ❑ ♦: Margin Ers. 8.5 x 14	Adjust the margin erase area. ♥: B4 ♦: 81/2" x 14"	(50 to 307) x (50 to 432) mm	♥: 249 x 360mm ♦: 208 x 352 mm	
*162	♥: Margin Ers. A4 ❑ ♦: Margin Ers. 8.5x11❑	Adjust the margin erase area. ♥: A4 Landscape ♦: 81/2" x 11" Landscape	(50 to 307) x (50 to 432) mm	♥: 202 x 293 mm ♦: 208 x 275 mm	

No.	Display	Function	Data	Factory Setting	Comments
*163	♥: Margin Ers. A4 ❑ ♦: Margin Ers. 8.5x11 ❑	Adjust the margin erase area. ♥: A4 Portrait ♦: 81/2" x 11" Portrait	(50 to 307) x (50 to 432) mm	♥ 289 x 206 mm ♦: 271 x 212 mm	
*164	♥: Margin Ers. B5 ❑ ♦: Margin Ers. 5.5x8.5 ❑	Adjust the margin erase area. ♥: B5 Landscape ♦: 51/2" x 81/2" Landscape	(50 to 307) x (50 to 432) mm	♥: 174 x 253 mm ♦: 132 x 212 mm	
*165	♥: Margin Ers. B5 ❑ ♦: Margin Ers. 5.5x8.5 ❑	Adjust the margin erase area. ♥: B5 Portrait ♦: 51/2" x 81/2" Portrait	(50 to 307) x (50 to 432) mm	♥: 249 x 178 mm ♦: 208 x 136 mm	
*166	♥: Margin Ers. A5 ❑ ♦: Margin Ers. **1 ❑	Adjust the margin erase area. ♥: A5 Landscape ♦: 2" x 2"	(50 to 307) x (50 to 432) mm	♥: 140 x 206 mm ♦: 50x 50 mm	
*167	♥: Margin Ers. A5 ❑ ♦: Margin Ers. **2 ❑	Adjust the margin erase area. ♥: A5 Portrait ♦: 2" x 2"	(50 to 307) x (50 to 432) mm	♥: 202 x 144 mm ♦: 50x 50 mm	
*168	♥: Margin Ers. A6 ❑ ♦: Margin Ers. **3 ❑	Adjust the margin erase area. ♥: A6 Landscape ♦: 2" x 2"	(50 to 307) x (50 to 432) mm	♥: 97x 144 mm ♦: 50x 50 mm	
*169	♥: Margin Ers. A6 ❑ ♦: Margin Ers. **4 ❑	Adjust the margin erase area. ♥: A6 Portrait ♦: 2" x 2"	(50 to 307) x (50 to 432) mm	♥: 140 x 101 mm ♦: 50x 50 mm	
*170	♥: Margin Ers. ** ❑ ♦: Margin Ers. **5 ❑	Adjust the margin erase area. ♥: Others ♦: 2" x 2"	(50 to 307) x (50 to 432) mm	♥: 92x 144 mm ♦: 50x 50 mm	

Remarks

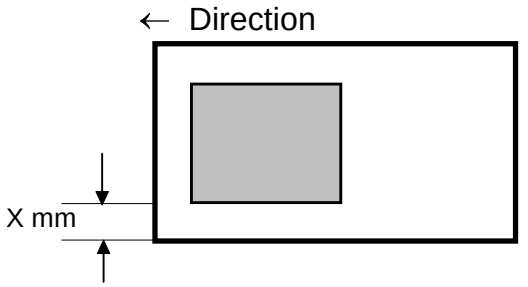
1) SP Mode No. 38 — ADF Scan Line Position

The printing position moves as shown below.



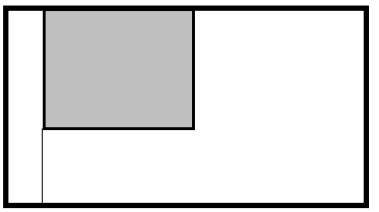
2) SP Mode No. 39 — Image Center Position

The printing position moves as shown below.



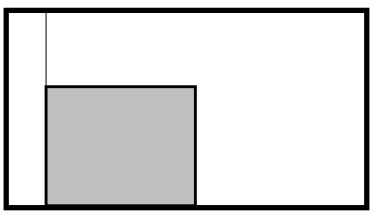
Original Position

+X: Moves X mm



Printing Position

-X: Moves down X mm



Printing Position

Note: When adjusting the scanner image position input "0" first:

Example) X = 0.9 mm → "0", "9", and then press the # key.

3) SP Mode No. 86 — A3 Drum 2 Count Up

The counter increment goes up by 2 if an A3 drum is installed, regardless of the size of paper.

The default setting is changed with DIP switch 102-5. See Sub-section 2.3.1. of section 4.

4) SP Mode No. 87 — Memory Print

Normally, in platen mode (when no originals are placed in the ADF), the machine stops when the 1st print job is finished even if the tape marker is installed, so that the next original can be placed. The next printing job starts when the Print Start key is pressed.
If "1" is selected in this mode, after the 1st print job is finished, the tape marker feeds a strip of tape and the next print job starts immediately afterwards.

5) SP Mode No. 88 — Auto Memory/ Class

In Memory/Class mode, the machine normally stops when the first print job is finished if the tape marker is not installed.
If "1" is selected in this mode, the machine stops for a while (this interval is the same as when the tape marker is operating). Then it continues with the next print (or master making) job.

6) SP Mode 92 — Thermal Paper Mode

You can use this mode to test the thermal head.

Place some thermal printer in the plotter face down and change this SP Mode to 1. Place an original on the exposure glass and press the Master Making key. The machine starts printing on the thermal paper without doing the master clamp process.

You can also enable SP Mode 90 and press the Master Making key to test the thermal head without placing an original on the exposure glass.

7) SP Mode 93 — Erase Area Check

This checks the erased area for shadow erase (Center and Edge Margin Erasing). If you make a master and print an image with this mode, the machine makes a background pattern on the area to be erased.

8) SP Mode No. 95 — Scanner Free Run

- It is possible to change the first scanner speed by changing the magnification ratio:
  25 to 200 % (Maximum speed = 25 %)
- To start the scanner free run, press the Print Start key after selecting "Lamp On/Off" using the # key.
  Input a magnification ratio if you wish to change the first scanner speed, before you press the Start key. (Factory setting = 25 %)
- To stop the scanner free run, press the Stop key. The scanner returns to home position, then stops.
- The machine does not exit SP mode until the scanner returns to home position correctly.

9) SP Mode No. 96 — ADF Original Feed Check

- It is possible to change the original feed speed by changing the magnification ratio:
  25 to 200 % (Maximum speed = 25 %)
- To start original feed, press the Print Start key after placing originals in the ADF.
  Input a magnification ratio if you wish to change the original feed speed, before you press the Start key. The ADF starts feeding until all originals are fed.
- To stop feeding, press the Stop key. The original stops at this moment.
- If the original feed fails, or if the Stop key is pressed, the "A + Jam" indicator turns on.
  If the jammed originals are removed from the ADF, the jam indicator turns off and the failure is reset.
- The machine does not exit SP mode during feeding.

10) SP Mode No. 118 — Print Size Count

- The print size counter indicates the following paper sizes:

A4 version

- A3
- B4
- A4 Landscape
- A4 Portrait
- B5 Landscape
- B5 Portrait
- * (Others)

LT version

- DLT
- LT
- LT Landscape
- LT Portrait
- HLT
- * (Others)

4.3.3 THERMAL HEAD TEST

This function is used to determine which printer component is causing an image problem on the master.

In this mode, the background pattern that is printed covers the entire sheet of paper.

Procedure

1. Place paper on the paper table.
   NOTE: To reduce thermal head load, use the smallest paper size possible, i.e. the smallest paper width on which the part with the image problem can be printed.

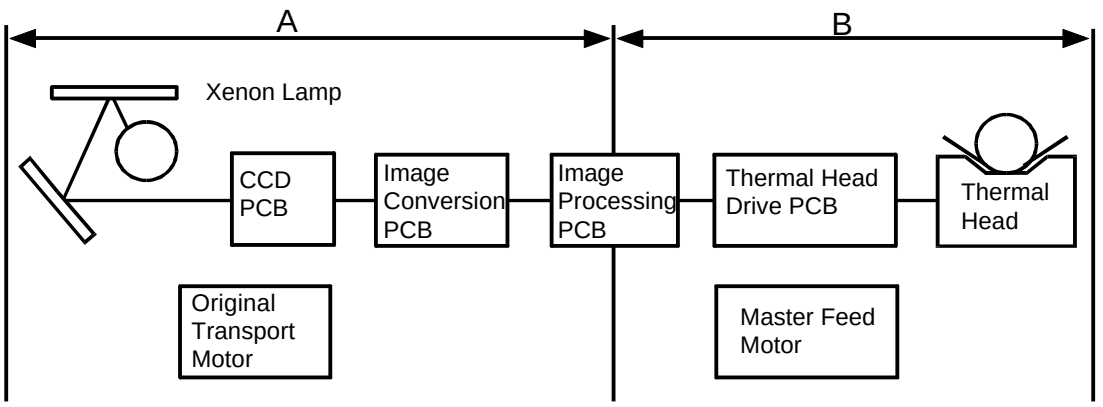
2. Access SP mode.
3. Input No. 90 and press the Enter key.
   NOTE: The factory setting is pattern No. 7. If necessary, input another background pattern with the Number keys.

4. Press the Master Making key (an original is not necessary).
5. Make some prints and check the image.

Assessment

If the printout is normal, a Part A component is defective.

If the printout is abnormal, a Part B component is defective.



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- This mode can be used in combination with SP mode No. 92, Thermal Paper Mode.

4.3.4 COMMAND SHEET CHECK

Normally, Fn 9 or Fn 19 cannot be input in Make-up mode.

By changing the data of SP mode #91 from 0 to 1, Fn 9 or Fn 19 can be input.

Command No.	Display	Function
Fn 9	OVERLAY	Prints both the original image and designated area of the command sheet on the paper.
Fn 19	OVERLAY	

This function is used to check the position of the designated area on the command sheet. It is checked in relation to the original image to make sure that the command sheet is being read correctly.

Procedure

1. Access SP mode.
2. Input 91 and press the Enter key.
3. Input 1 with the number keys and press the Enter key.
4. Press the Clear Modes key to leave SP mode.
5. Place the command sheet and the original on the ADF.
6. Press the Make-up key and input Fn 9 or Fn 19 (these commands have the same function).
7. Input 1 for the undesignated area.
8. Press the Master Making key and then check the print to make sure that the area designated by the command sheet is in the correct position on the original image.

NOTE: 1) Only one command sheet can be stored in memory. If two or more command sheets are read, only the last command sheet is output.
2) Make sure to return the SP mode to its original setting after checking the designated area position.

4.3.5 INPUT/OUTPUT CHECK MODE

This program checks the electrical components. The procedure for accessing the program is as follows:

Input Check Mode Access Procedure

1. Access SP mode. (See the SP mode access procedure.)
2. Enter 130 (SP mode number) with the number keys.
3. Press the Enter key.
4. Enter the desired input number. (See the input check table.)
   NOTE: The input number can be shifted up or down by pressing the Zoom key.
5. Press the Enter key.
   NOTE: In the input check mode, all image position LEDs and printing speed LEDs turn on when a sensor or switch that is being tested is actuated. A beep will also be heard.
6. Press the Enter key to return the display to the initial input check menu.
7. Press the Clear Modes key to leave SP mode.

Output Check Mode Access Procedure

1. Access SP mode. (See the SP mode access procedure.)
2. Enter 131 (SP mode number) with the number keys.
3. Press the Enter key.
4. Enter the desired output number. (See the output check table.)
   NOTE: The output number can be shifted up or down by pressing the Zoom key ("+" or "-").
5. Press the Enter key.
6. Press the Print Start key to turn on the component.
7. Press the Enter key to return the display to the initial output check menu.
8. Press the Clear Modes key to leave the SP mode.

Input Check Table

Code	LCD Display	Component Checked
1.	SN: ADF Cover In- 1	ADF Cover Sensor
2.	SN: 1st Original (ADF) In- 2	Original Set Sensor
3.	SN: 2nd Original (ADF) In- 3	Original Registration Sensor
4.	SN: 3rd Original (ADF) In- 4	Scan Line Sensor
5.	SN: Original Size 0 In- 5	Original Width Sensor - 0
6.	SN: Original Size 1 In- 6	Original Width Sensor - 1
7.	SN: Original Size 2 In- 7	Original Width Sensor - 2
8.	SN: Original Size 3 In- 8	Original Width Sensor - 3
9.	SN: Cassette Size 0 In- 9	Cassette Size Switch - 4
10.	SN: Cassette Size 1 In-10	Cassette Size Switch - 3
11.	SN: Cassette Size 2 In-11	Cassette Size Switch - 2
12.	SN: Cassette Size 3 In-12	Cassette Size Switch - 1
13.	SN: Paper Size 0 In-13	Paper Width Sensor - 0
14.	SN: Paper Size 1 In-14	Paper Width Sensor - 1
15.	SN: Paper Size 2 In-15	Paper Width Sensor - 2
16.	SN: Paper Size 3 In-16	Paper Width Sensor - 3
17.	SN: Paper Size 4 In-17	Paper Length Sensor
18.	SN: Paper End In-18	Paper End Sensor
19.	SW: Paper Table Open In-19	Paper Table Open Switch
20.	SN: Paper Table Low Limit In-20	Paper Table Lower Limit Sensor
21.	SN: Paper Table Height In-21	Paper Table Height Sensor
22.	KEY: Lower Paper Feed Table In-22	Paper Table Down key
23.	SW: Right Cutter In-23	Right Cutter Switch

Code	LCD Display	Component Checked
24.	SW: Left Cutter In-24	Left Cutter Switch
25.	SN: Master Buckle In-25	Master Buckle Sensor
26.	SN: Master End In-26	Master End Sensor
27.	SIG: Ink In-27	When the Ink Detecting Pin detects ink
28.	SIG: Color Drum In-28	When a color drum is installed
29.	SIG: Drum Size 0 In-29	When an A3/DLT or A4/LG drum is installed
30.	SIG: Drum Size 1 In-30	When an A4/LT drum is installed
30.	SIG: Drum Set In-30	When an A4/LT drum is installed
31.	SN: Pressure Plate High Position In-31	Upper Pressure Plate Sensor
32.	SN: Pressure Plate Low Position In-32	Lower Pressure Plate Sensor
33.	SW: Master Eject Box In-33	Master Eject Box Switch
34.	SN: Full Master In-34	Full Master Box Sensor
35.	SN: Printing Pressure In-35	Printing Pressure Sensor
36.	SN: 1st Drum Position In-36	First Drum Position Sensor
37.	SN: 2nd Drum Position In-37	Second Drum Position Sensor
38.	SW: Manual Master Cut In-38	Master Cut Switch
39.	SIG: Key Counter In-39	When a key counter is installed
40.	SIG: Power Supply Temp. Detect In-40	When the power supply unit temperature is over 85 °C
41.	SN: 1st Paper Exit In-41	First Paper Exit Sensor
42.	SN: 2nd Paper Exit In-42	Second Paper Exit Sensor
43.	SN: Master Eject In-43	Master Eject Sensor
44.	SN: Drum Master In-44	Drum Master Sensor
45	SN: Scanner Home Position In-45	Scanner Home Position Sensor

Code	LCD Display	Component Checked
46	SN: Platen Angle (Scanner) In-46	Platen Cover Position Sensor
47	SN: Platen Set (Scanner) In-47	ADF Set Sensor
48	SN: Platen Original (Scanner) In-48	Original Sensor
49	SN: 4th Original (ADF) In-49	Original Exit Sensor
50	SW: Delivery Table Open In-50	Delivery Table Open Switch
51	SN: Paper Registration In-51	Paper Registration Sensor
52	SN: T. Head Position In-52	Thermal Head Pressure Release Sensor
60	SN: Feed Unit Low (1st Sorter) In-60	1st Transport Non-Sort Mode Position Sensor (Sorter)
61	SN: Feed Unit High (1st Sorter) In-60	1st Transport Sort Mode Position Sensor (Sorter)
62	SN: Feed Unit Cover (1st Sorter) In-62	1st Transport Cover Open Switch (Sorter)
63	SN: Safety Switch (1st Sorter) In-63	Staple Cover Open Switch (1st Sorter)
64	SN: Staple Cover (1st Sorter) In-64	Staple Cover Open Switch (1st Sorter)
65	SN: Paper Edge (1st Sorter) In-65	Trailing Edge Sensor (Sorter)
66	SN: Sort Paper (1st Sorter) In-66	1st Transport Sensor (Sorter)
67	SN:Stapler Position (1st Sorter) In-67	Staple Position Switch (1st Sorter)
68	SN: Stapler Unit Move (1st Sorter) In-68	Staple Unit Movement Switch (1st Sorter)
69	SN: Stapler H.P. (1st Sorter) In-69	Staple Home Position Sensor (1st Sorter)
70	SN;Staple End (1st Sorter) In-70	Staple End Sensor (1st Sorter)
71	SN: Jogger Bar H.P. (1st Sorter) In-71	Jogger Bar Home Position Sensor (1st Sorter)
72	SN: Lead Cam H.P. (1st Sorter) In-72	Helical Wheel Position Sensor (1st Sorter)
73	SN: Bin Home Position (1st Sorter) In-73	Bin Unit Home Position Sensor (1st Sorter)
74	SN: Bin Paper (1st Sorter) In-74	Bin/Jam Sensor (1st Sorter)
75	KEY: Stapler (1st Sorter) In-75	Manual Staple Key (1st Sorter)
76	SN: Staple Paper (1st Sorter) In-76	Paper Sensor-Stapler (1st Sorter)

Code	LCD Display	Component Checked
77	SN: Bin Shift MT CLK (1st Sorter) In-77	Bin Shift Motor Rotation Sensor (1st Sorter)
78	SN: Feed Motor CLK1 (1st Sorter) In-78	1st Transport Motor Rotation Sensor (1st Sorter)
79	SN: Feed Motor CLK2 (1st Sorter) In-79	2nd Transport Motor Rotation Sensor (Sorter)
80	SN: Staple Cover (2nd Sorter) In-80	Staple Cover Open Switch (2nd Sorter)
81	SN: Paper Edge (2nd Sorter) In-81	Trailing Edge Sensor (2nd Sorter)
82	SN: Sort Paper (2nd Sorter) In-82	2nd Transport Sensor (Sorter)
83	SN: Stapler Position (2nd Sorter) In-83	Staple Position Switch (2nd Sorter)
84	SN: Stapler Unit Move (2nd Sorter) IN-84	Staple Home Position Sensor (2nd Sorter)
85	SN: Stapler H.P. (2nd Sorter) IN-85	Staple End Sensor (2nd Sorter)
86	SN: Staple End (2nd Sorter) In-86	Staple End Sensor (2nd Sorter)
87	SN: Jogger Bar H.P. (2nd Sorter) In-87	Jogger Bar Home Position Sensor (2nd Sorter)
88	SN: Lead Cam H.P. (2nd Sorter) In-88	Helical Wheel Home Position Sensor (2nd Sorter)
89	SN: Bin Home Position (2nd sorter) In-89	Bin Unit Home Position Sensor (2nd Sorter)
90	SN: Bin Paper (2nd Sorter) In-90	Bin/Jam Sensor (2nd Sorter)
91	KEY: Stapler (2nd Sorter) In-91	Manual Staple Key (2nd Sorter)
92	SN: Stapler Paper (2nd Sorter) In-92	Paper Sensor-Stapler (2nd Sorter)
93	SN: Bin Shift MT .LK (2nd Sorter) In-93	Bin Shift Motor Rotation Sensor (2nd Sorter)
100	SN: Cassette Paper	Cassette Paper End Sensor (LCT)
101	SN: Paper End	Tray Paper Position Sensor (LCT)
102	SN: Paper Position	Tray Paper Position Sensor (LCT)
103	SIG: LCT	CN110 Connection (Should be ON when connected)
104	SN: Low Limit	Tray Lower Limit Sensor (LCT)
105	SN: Paper MAX. Limit	Maximum Paper Load Sensor (LCT)
106	KEY: Lower LCT	Tray Down Switch (LCT)
107	SN: Paper Size 0	Paper Size Sensor 0 (LCT)
108	SN: Paper Size 1	Paper Size Sensor 1 (LCT)
109	SN: Paper Size 2	Paper Size Sensor 2 (LCT)
110	SN: Paper Size 3	Paper Size Sensor 3 (LCT)
111	SN: Paper Size 4	Paper Size Sensor 4 (LCT)
112	SN: LCT Cover	Cover Open Switch (LCT)

Code	LCD Display	Component Checked
113	SIG: Cassette	Cassette Switch (LCT)

Output Check Table

Code	LCD Display	Description
2	MOTOR: ADF Drive Out- 2	Turns on the ADF drive motor.
3	MOTOR: Master Eject Out- 3	Turns on the master eject motor.
4	MOTOR: Pressure Plate Up/Down Out- 4	Turns on the pressure plate up/down motor.
5	MC: Master Reverse Roller Out- 5	Turns on the master reverse roller magnetic clutch.
6	MOTOR: Vacuum Out- 6	Turns on the vacuum fan motor.
7	MOTOR: Air Knife Out- 7	Turns on the air knife motor.
8	SIG: Key Counter Out- 8	Increments the key counter.
9	COUNTER: Master Out- 9	Increments the master counter.
10	COUNTER: Paper Out-10	Increments the total counter.
11	SOL: Paper Separation Release Out-11	Turns on the separation plate release solenoid.
12	SOL: Ink Supply Out-12	Turns on the ink supply solenoid.
13	SOL: Drum Lock Out-13	Turns on the drum lock solenoid.
14	SOL: Paper Feed/Print Pressure Out-14	Turns on the paper feed solenoid and the printing pressure solenoid.
15	SOL: Master Feed Clamper Out-15	Turns on the master feed clamper solenoid.
16	SOL: Master Eject Clamper Out-16	Turns on the master eject clamper solenoid.
17	SOL: Master Eject Out-17	Turns on the master eject solenoid.
18	RELAY: Paper Table Down Out-18	Turns on the paper table drive motor (down).
19	RELAY: Paper Table Up Out-19	Turns on the paper table drive motor (up).
20	RELAY: Main Motor Reverse Out-20	Turns the drum in the direction opposite to the printing direction.
21	SIG: Fluorescent Lamp Out-21	Turns on the exposure lamp if the Print key is pressed. Turns off the lamp if the Print key is pressed again.
22	MOTOR: Cutter + Direction Out-22	Turns on the cutter motor (moves it to the rear of the machine).
23	MOTOR: Cutter — Direction Out-23	Turns on the cutter motor (moves it to the front of the machine).
24	MOTOR: Image Shift + Direction Out-24	Turns the image position motor in the "+" direction.

Code	LCD Display	Description
25	MOTOR: Image Shift — Direction Out-25	Turns the image position motor in the "-" direction.
26	MOTOR: Main (10 rpm) Out-26	Turns on the main motor (10 rpm).
27	MOTOR: Main (30 rpm) Out-27	Turns on the main motor (30 rpm).
28	MOTOR: Main (1st Speed) Out-28	Turns on the main motor (1st speed).
29	MOTOR: Main (2nd Speed) Out-29	Turns on the main motor (2nd speed).
30	MOTOR: Main (3rd Speed) Out-30	Turns on the main motor (3rd speed).
31	MOTOR: Main (4th Speed) Out-31	Turns on the main motor (4th speed).
32	MOTOR: Main (5th Speed) Out-32	Turns on the main motor (5th speed).
33	MOTOR: Original Feed Out-33	Turns on the original transport motor.
34	MOTOR: Master Feed Out-34	Turns on the master feed motor.
35	MOTOR: Paper Reverse Out-35	Turns on the paper return motor.
36	Turn on drum, feed/ pressure SOLs Out-36	Turns on the main motor (10 rpm), the paper feed solenoid, and the printing pressure solenoid.
37	MOTOR: Scanner	Turns on the scanner motor. Start by pressing the Print Start key. Stop by pressing the Print Start key again. Then the scanner (carriage) returns to home position when the Print Start key is pressed.
38	SOL: Sheet Insert Out-38	Turns on the master press sheet solenoid.
39	SOL: Sheet Pressure Out-39	Turns on the detection arm release solenoid.
40	MOTOR: Master Buckle Out-40	Turns on the master buffer fan motor.
41	SIG: VHD on Out-41	Applies thermal head voltage.
42	MOTOR: T. Head Up/Down Out-42	Turns on the thermal head pressure release motor.
50	EMF Sorter Mode 1 Out-50	Available only when the EMF Sorter is installed.
51	EMF Sorter Mode 2 Out-51	Available only when the EMF Sorter is installed.
52	EMF Sorter Mode 3 Out-53	Available only when the EMF Sorter is installed.
53	EMF Sorter Mode 4 Out-53	Available only when the EMF Sorter is installed.

Code	LCD Display	Description
60	MODE: Feed Unit U/D (1st Sorter) Out-60	Turns on the paper delivery table motor.
61	MOTOR: Paper Feed (1st Sorter) Out-61	Turns on the 1st transport motor.
62	MOTOR: Paper Feed (2nd Sorter) Out-62	Turns on the 2nd transport motor.
63	MODE: Bin Shift (1st Sorter) Out-63	Turns on the bin shift motor (1st Sorter)
64	MODE: Jogger (1st Sorter) Out-64	Turns on the jogger bar motor. (1st Sorter)
65	MODE: Staple (1st Sorter) Out-65	Turns on the staple motor. (1st Sorter)
66	MODE: Bin Home (1st Sort) Out-66	Moves the bins to the home position. (1st Sorter)
67	MODE: Bin Shift (2nd Sorter) Out-67	Turns on the bin shift motor. (2nd Sorter)
68	MODE: Jogger (2nd Sorter) Out-68	Turns on the jogger bar motor. (2nd Sorter)
69	MODE: Staple (2nd Sorter) Out-69	Turns on the staple motor (2nd Sorter)
70	MODE: Bin Home (2nd Sorter) Out-70	Moves the bins to the home position. (2nd Sorter)
71	MODE: Free Running (Sorter) Out-71	The machine simulates sort speration.
100	MOTOR: Table Down (LCT) Out-100	The LCT tray drive motor moves the tray down.
101	Motor:Table Up (LCT) Out-101	The LCT tray drive motor moves the tray up.
102	MOTOR: Cassette Down Out-102	The LCT cassette bottom plate drive motor moves the plate down.
103	MOTOR: Cassette Up (LCT) Out-103	The LCT cassette bottom plate drive motor moves the plate up.

4.3.6 USER CODE MODE

User Codes

With the user code function, operators must input an authorized code before the machine will operate. The machine keeps track of the number of prints made under each code.

There are 20 user codes as follows:

No.	User Code No.
1	382
2	191
3	182
4	173
5	164
6	155
7	146
8	137
9	128
10	119
11	482
12	291
13	282
14	273
15	264
16	255
17	246
18	237
19	228
20	219

How To Use a User Code

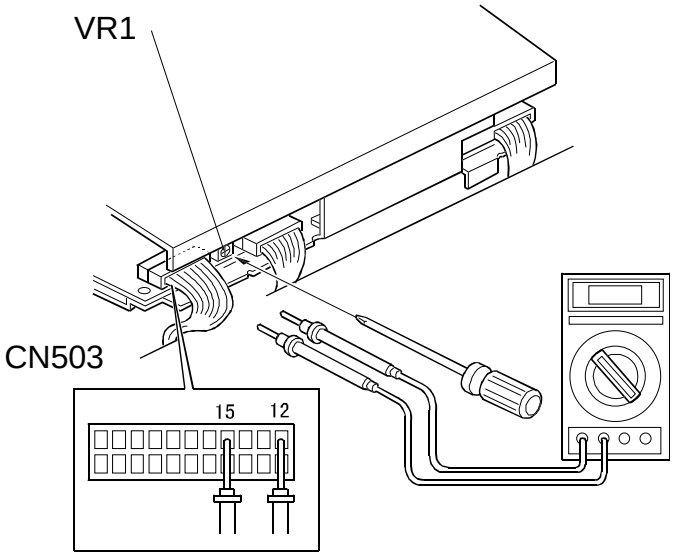
1. Enter the user code (3 digits) with the number keys.
2. Press the Enter key.
3. Press the Master Making key to start printing.
   NOTE: The user code mode is reset if the Clear Modes key and the Stop key are pressed together.

SECTION 5
REPLACEMENT AND ADJUSTMENT

5. REPLACEMENT AND ADJUSTMENT

5.1 MASTER FEED

5.1.1 THERMAL HEAD VOLTAGE ADJUSTMENT



C228R500.WMF

Purpose: To maintain the quality of masters and to extend the life of the thermal head.

Adjustment Standard:

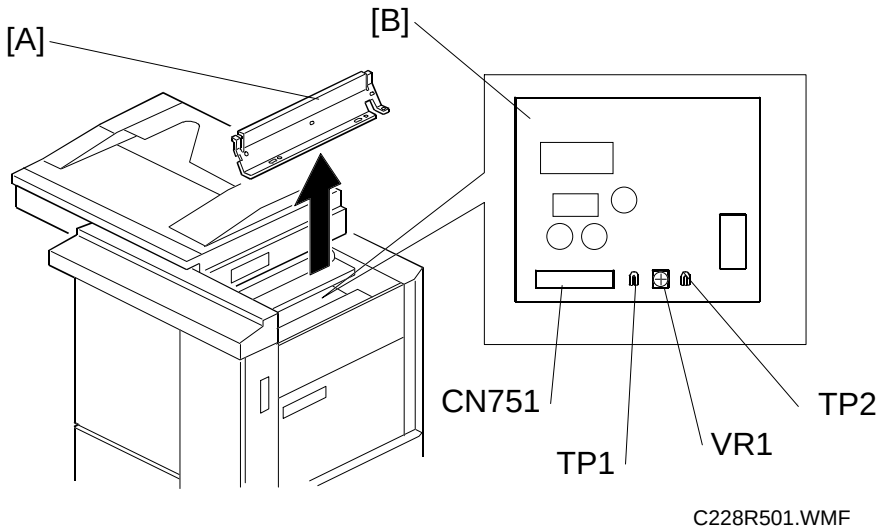
There are two steps.

1) The output voltage for the thermal head from the power supply unit must be 22.5 volts (± 0.5).
2) The output from the DC/DC converter board is different from one thermal head to another. Refer to the voltage value (X) on the thermal head decal. The output should be between "X-0.1" and "X" volts.

NOTE: This adjustment is always required when the thermal head or power supply unit is replaced.

1. Turn off the main switch and remove the paper exit cover plate (4 screws).
2. Disconnect connector CN503 of the power supply unit.
3. Turn on the main switch, and access the SP mode and select output check mode (SP131) No. 41.
4. Press the Print Start key to apply thermal head voltage continuously (60 seconds).
5. Check the voltage between CN503-15 and CN503-12. If the voltage is not 22.5 volts (± 0.5), turn VR1 on the power supply board to adjust the voltage.

6. Leave the SP mode and turn off the main switch. Then, connect CN503 of the power supply unit.

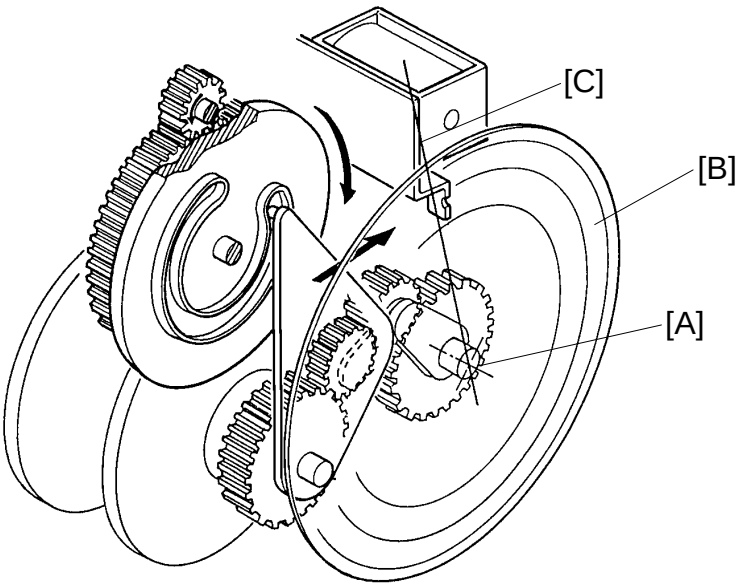


C228R501.WMF

7. Open the scanner unit, and remove the thermal head cover [A].
8. Disconnect connector CN751 on the DC/DC converter board [B].
9. Check the voltage on the thermal head decal. (The value is different from one thermal head to another.)
10. Turn on the main switch.
11. Access the SP mode and select output check mode (SP131) No. 41.
12. Press the Print Start key to apply thermal head voltage continuously (60 seconds).
13. Check the voltage between TP1 and TP2 on the DC/DC converter board. If the voltage is out of the standard range (the value on the thermal head decal +0/-0.1 volt), turn VR1 on the DC/DC converter board to adjust the voltage.
14. Leave the SP mode and turn off the main switch. Reinstall the removed parts.

5.2 PAPER FEED

5.2.1 SECOND FEED ROLLER START TIMING

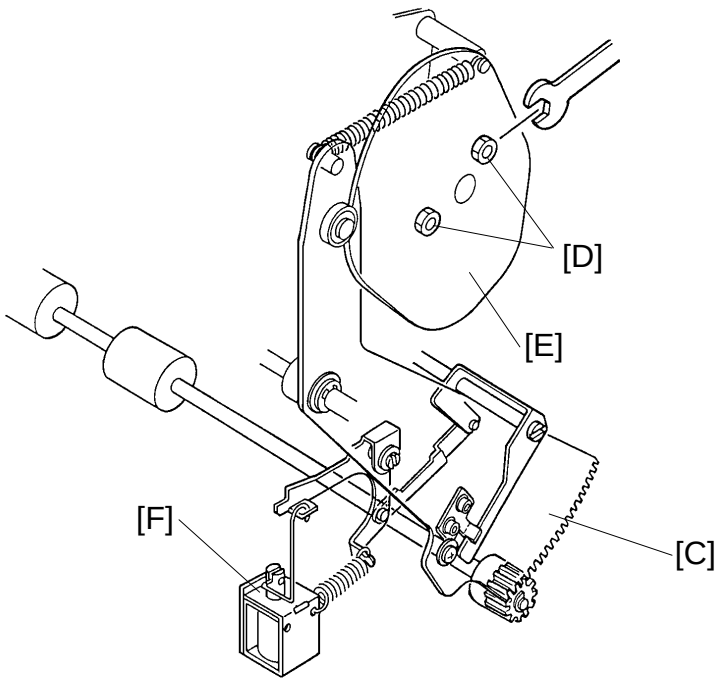


C223R551-1.PCX

Purpose: To ensure correct paper feed by calibrating the second feed roller start timing, and to adjust the leading edge margin.

Adjustment Standard: 144°

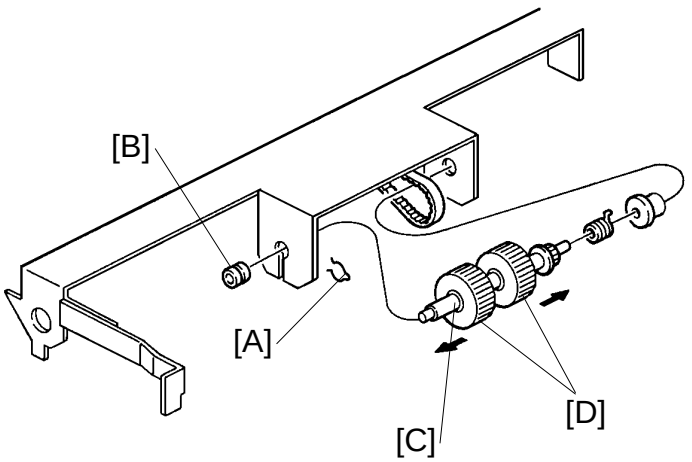
1. Set the Image Position indicator to the "0" position and return the drum to the home position by turning the main switch off and on. Then, turn the main switch off and unplug the machine.
2. Remove the rear cover of the machine.
3. Position a protractor [B] on the end of the image shift shaft [A].
   NOTE: Align the origin of the protractor with the edge of the solenoid bracket [C].



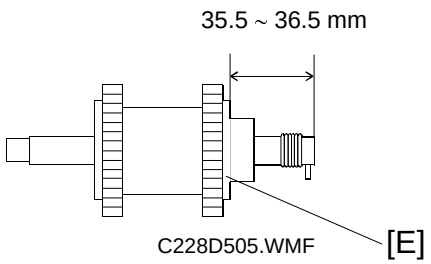
C223R552.PCX

4. Turn on the paper feed solenoid [F] manually and, using a 10 mm spanner, gradually turn the drum rotation shaft.
5. Measure the degrees turned when the second feed roller sector gear [C] starts returning counterclockwise (when the second feed rollers start rotating). This should be 144°.
6. If it is not, loosen the 2 bolts [D] and adjust the second feed roller rotation timing by turning the cam [E].

5.2.2 PAPER FEED ROLLER REMOVAL



C223R553.PCX



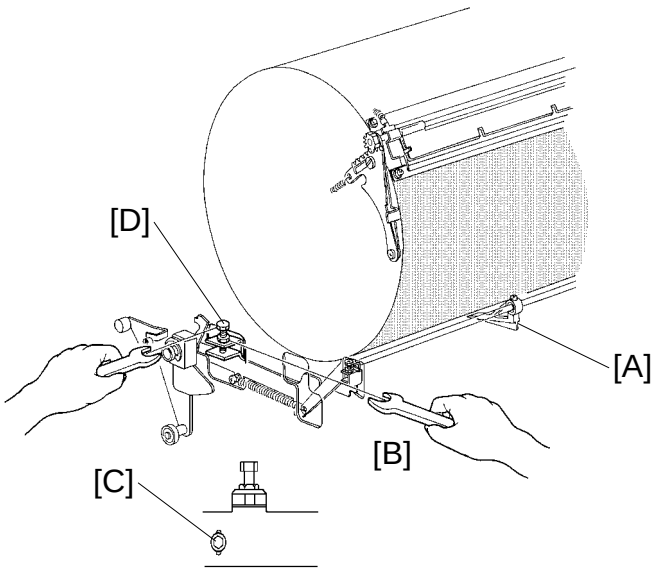
C228D505.WMF

1. Remove the left clip [A].
2. Remove the left bushing [B].
3. Remove the paper feed roller shaft [C].
4. Remove the 2 paper feed rollers [D].

NOTE: When reassembling, make sure that the position of the core roller [E] on the shaft is between 35.5 mm and 36.5 mm from the end of the shaft as shown.

5.3 DELIVERY

5.3.1 EXIT PAWL TIMING ADJUSTMENT



C223R589.PCX

Purpose: To ensure that the exit pawl does not touch the master clamper.

Adjustment Standard: 228 ± 2°

1. Remove the rear cover of the machine.
2. Press and hold down the Drum Rotation button until the drum reaches the home position.
3. Position a protractor on the end of the image shift shaft. Position the origin of the protractor at the bracket of the master feed clamper solenoid.
4. Manually press in the plunger of the printing pressure solenoid. Release the paper detection arm manually by rotating the drum rotation shaft with a spanner (10 mm).
5. Measure the degrees turned when the exit pawl [A] comes closest to the drum. This must be 228 ± 2°.
6. If it is not, loosen the hexagon nut [B] and screw [C], then adjust the exit pawl position by turning the hexagon bolt [D].
7. Check the adjustment by repeating steps 4 to 6.

SECTION 6

POINT TO POINT DIAGRAM

6. POINT TO POINT DIAGRAM (C228)

Location Map 1/2 (Main Diagram)

- Section A
- Section B
- Section C
- Section D
- Section E
- Section F

Location Map 2/2 (Main Control PCB Details)

- Section G
- Section H
- Section I
- Section J
- Section K
- Section L

NOTE: The symbols and wire color codes used in the diagrams are as follows:

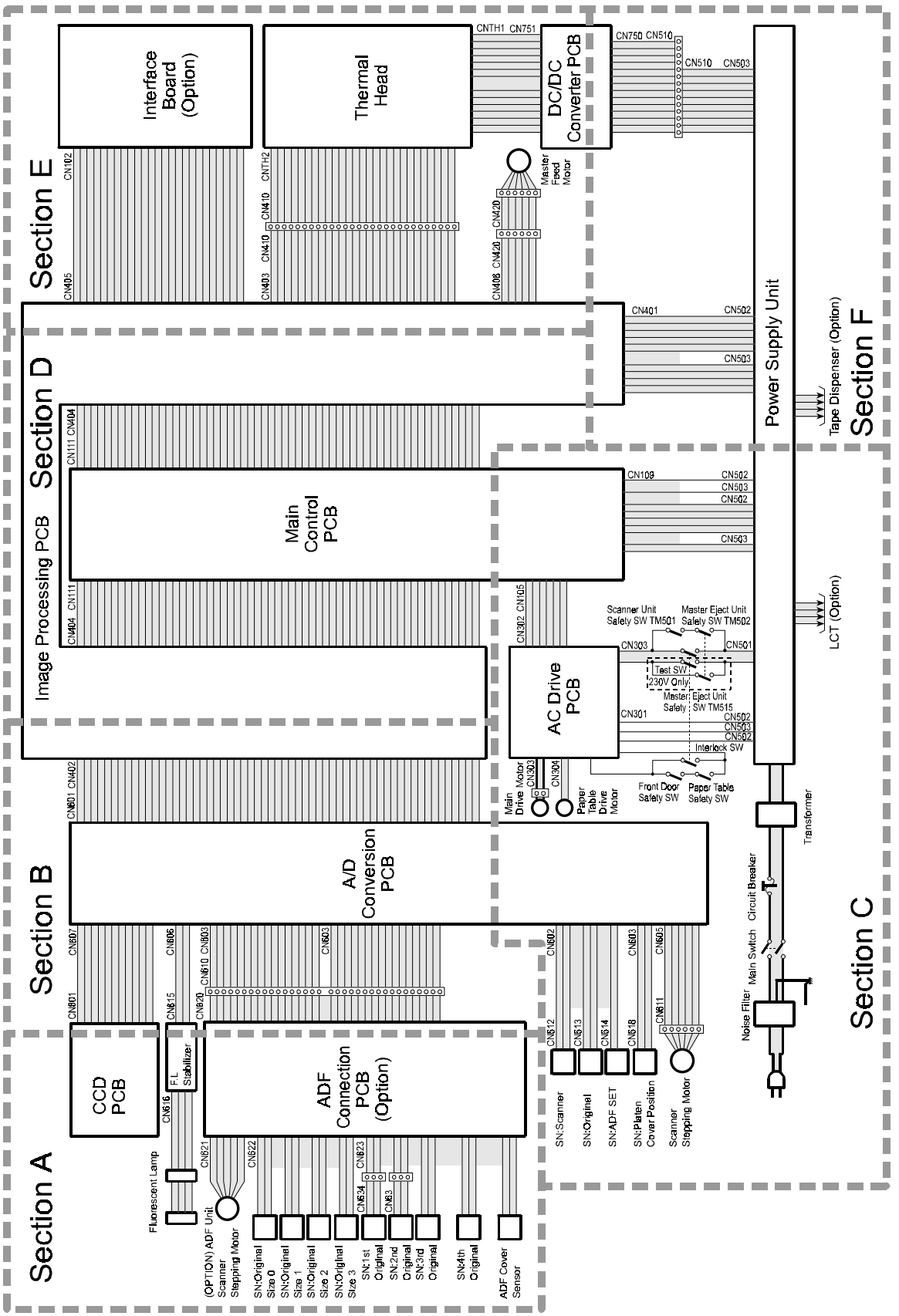
- SYMBOL TABLE -

———	AC Line
———	DC Line
·····	Pulse Signal Line
▷	Signal Direction
▲	Active High Signal
▼	Active Low Signal

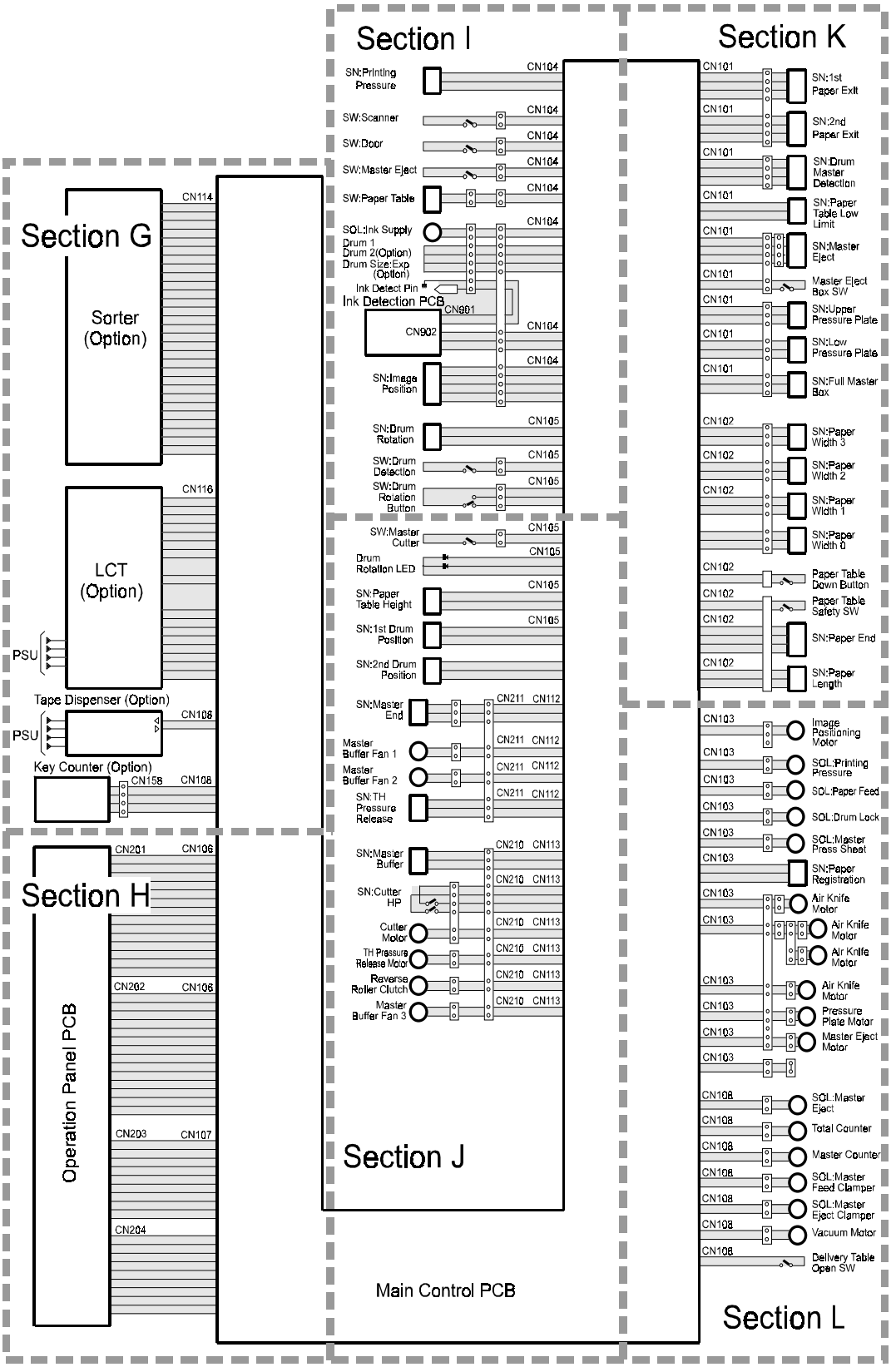
- WIRE COLOR CODE -

(B) - Black
(C) - Blue
(G) - Green
(H) - Gray
(M) - Purple
(P) - Pink
(R) - Red
(S) - Sky blue
(T) - Brown
(W) - White
(Y) - Yellow
(Z) - Orange

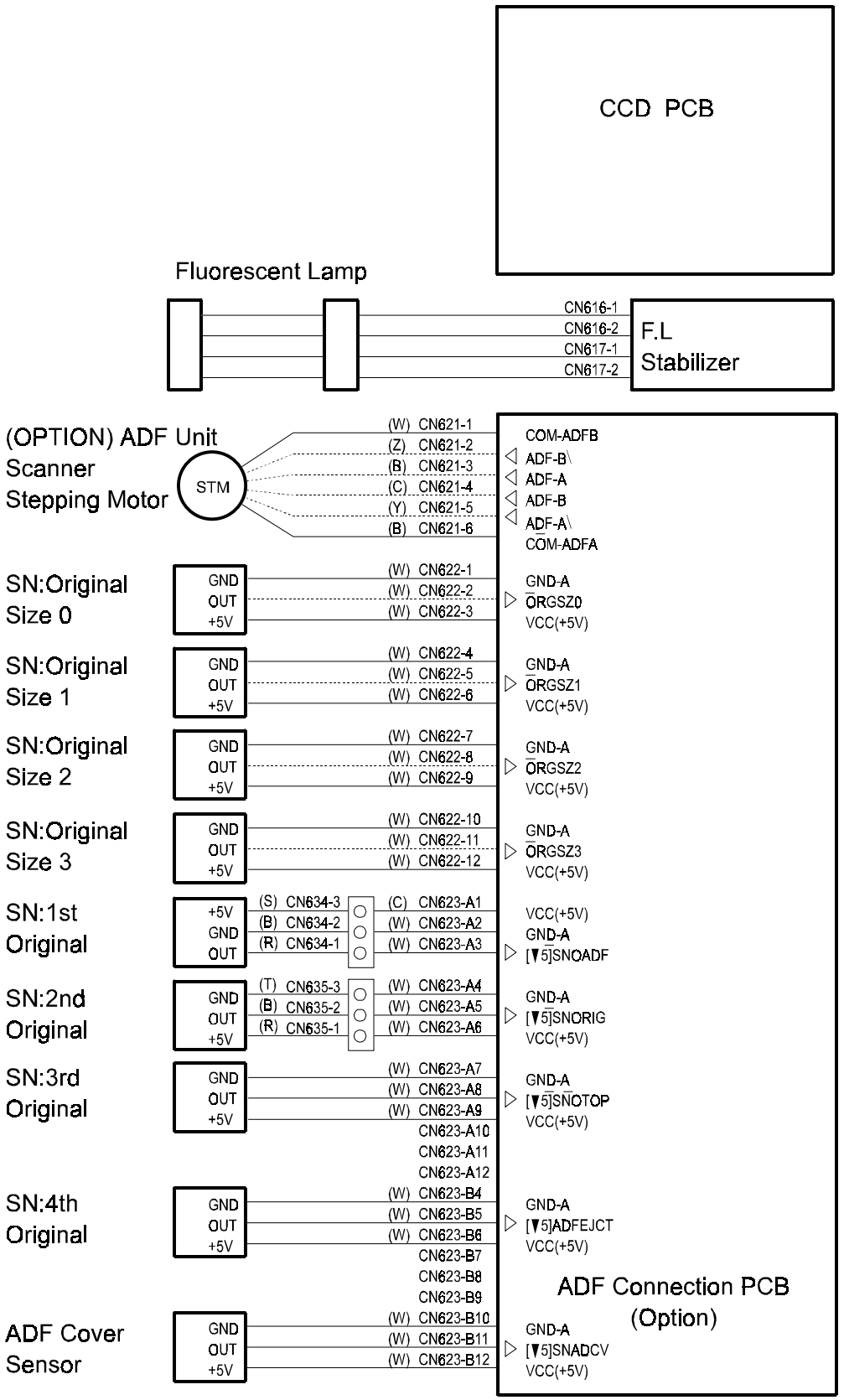
Location Map 1/2 (Main Diagram)



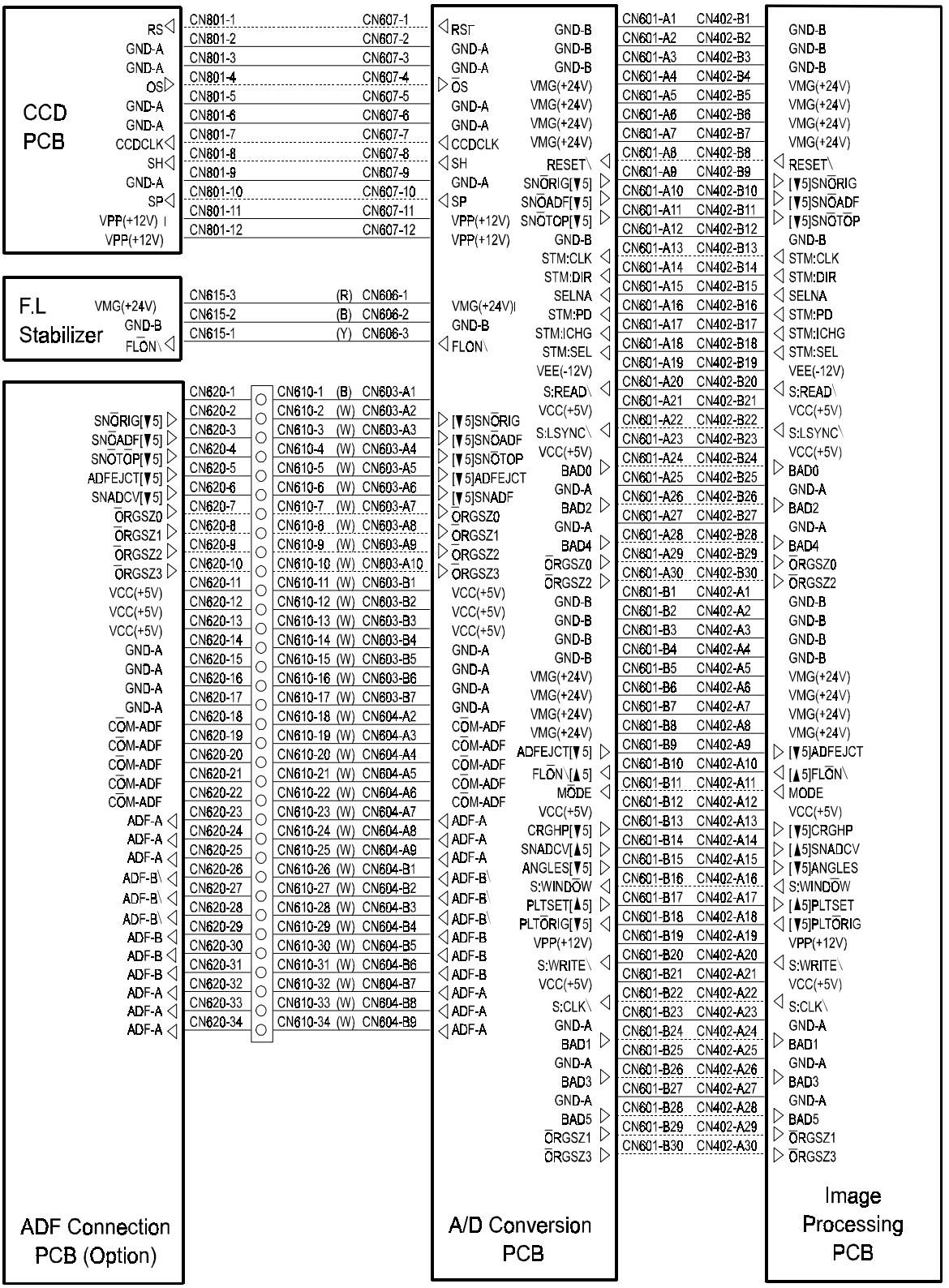
Location Map 2/2 (Main Diagram)



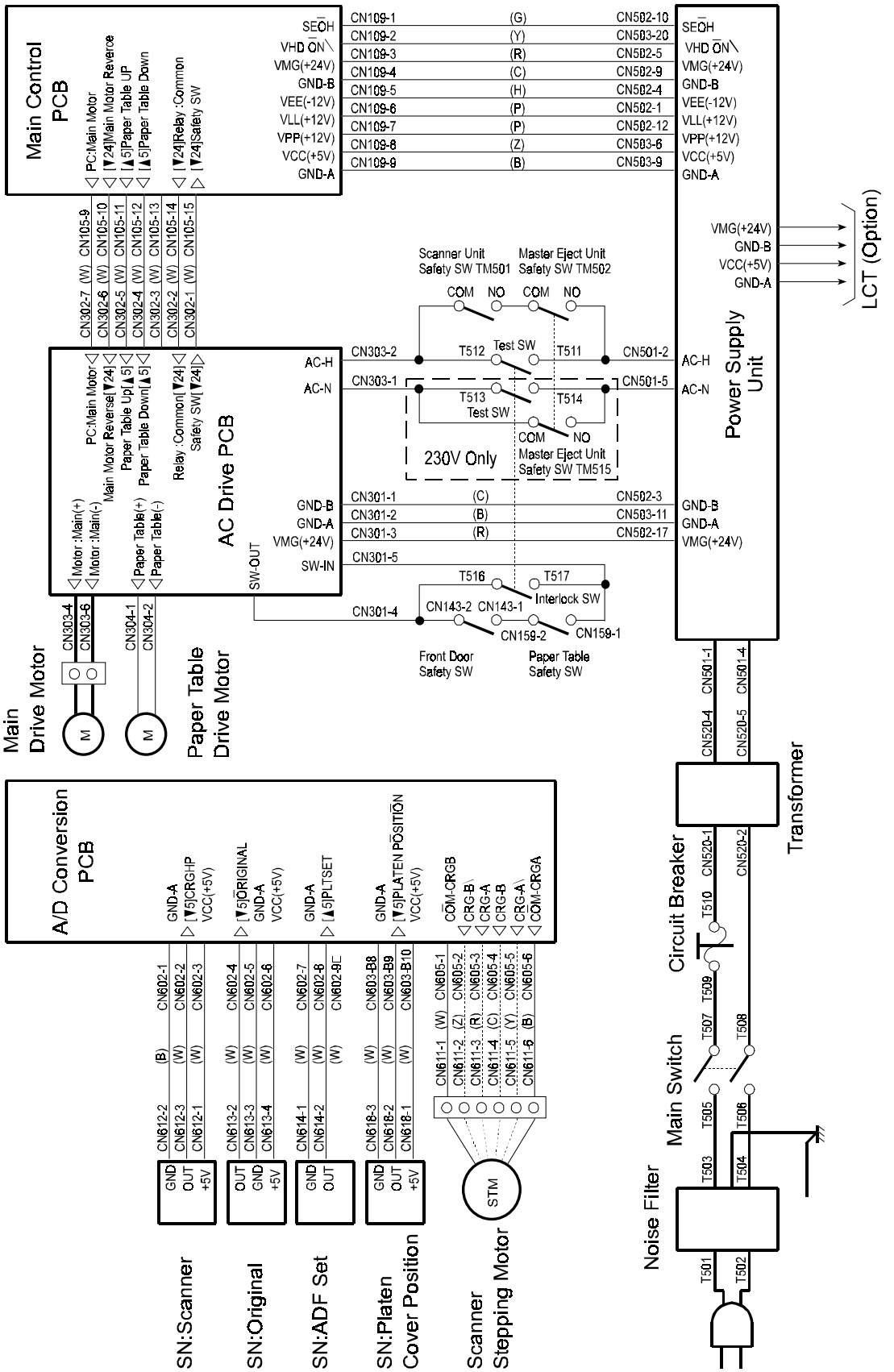
Section A


CCD PCB
Fluorescent Lamp
CN616-1
CN616-2
CN617-1
CN617-2
F.L
Stabilizer
(OPTION) ADF Unit
Scanner
Stepping Motor
STM
(W) CN621-1
(Z) CN621-2
(B) CN621-3
(C) CN621-4
(Y) CN621-5
(B) CN621-6
COM-ADFB
ADF-B\
ADF-A
ADF-B
ADF-A\
COM-ADFA
SN:Original
Size 0
GND
OUT
+5V
(W) CN622-1
(W) CN622-2
(W) CN622-3
GND-A
ORGSZ0
VCC(+5V)
SN:Original
Size 1
(W) CN622-4
(W) CN622-5
(W) CN622-6
GND-A
ORGSZ1
VCC(+5V)
SN:Original
Size 2
(W) CN622-7
(W) CN622-8
(W) CN622-9
GND-A
ORGSZ2
VCC(+5V)
SN:Original
Size 3
(W) CN622-10
(W) CN622-11
(W) CN622-12
GND-A
ORGSZ3
VCC(+5V)
SN:1st
Original
+5V
GND
OUT
(S) CN634-3
(B) CN634-2
(R) CN634-1
(C) CN623-A1
(W) CN623-A2
(W) CN623-A3
VCC(+5V)
GND-A
[▼5]SNOADF
SN:2nd
Original
(T) CN635-3
(B) CN635-2
(R) CN635-1
(W) CN623-A4
(W) CN623-A5
(W) CN623-A6
GND-A
[▼5]SNORIG
VCC(+5V)
SN:3rd
Original
(W) CN623-A7
(W) CN623-A8
(W) CN623-A9
GND-A
[▼5]SNOTOP
VCC(+5V)
CN623-A10
CN623-A11
CN623-A12
SN:4th
Original
(W) CN623-B4
(W) CN623-B5
(W) CN623-B6
GND-A
[▼5]ADFEJCT
VCC(+5V)
CN623-B7
CN623-B8
CN623-B9
ADF Connection PCB
(Option)
ADF Cover
Sensor
(W) CN623-B10
(W) CN623-B11
(W) CN623-B12
GND-A
[▼5]SNADCV
VCC(+5V)

Section B


CCD PCB
RS
GND-A
GND-A
OS
GND-A
GND-A
CCDCLK
SH
GND-A
SP
VPP(+12V)
VPP(+12V)
CN801-1 CN607-1
CN801-2 CN607-2
CN801-3 CN607-3
CN801-4 CN607-4
CN801-5 CN607-5
CN801-6 CN607-6
CN801-7 CN607-7
CN801-8 CN607-8
CN801-9 CN607-9
CN801-10 CN607-10
CN801-11 CN607-11
CN801-12 CN607-12
F.L Stabilizer
VMG(+24V)
GND-B
FLON\
CN615-3 (R) CN606-1
CN615-2 (B) CN606-2
CN615-1 (Y) CN606-3
ADF Connection PCB (Option)
SNORIG[▼5]
SNOADF[▼5]
SNOTOP[▼5]
ADFEJCT[▼5]
SNADCV[▼5]
ORGSZ0
ORGSZ1
ORGSZ2
ORGSZ3
VCC(+5V)
VCC(+5V)
VCC(+5V)
GND-A
GND-A
GND-A
GND-A
COM-ADF
COM-ADF
COM-ADF
COM-ADF
COM-ADF
ADF-A
ADF-A
ADF-A
ADF-B\
ADF-B\
ADF-B\
ADF-B
ADF-B
ADF-B
ADF-A
ADF-A
ADF-A
CN620-1 CN610-1 (B) CN603-A1
CN620-2 CN610-2 (W) CN603-A2
CN620-3 CN610-3 (W) CN603-A3
CN620-4 CN610-4 (W) CN603-A4
CN620-5 CN610-5 (W) CN603-A5
CN620-6 CN610-6 (W) CN603-A6
CN620-7 CN610-7 (W) CN603-A7
CN620-8 CN610-8 (W) CN603-A8
CN620-9 CN610-9 (W) CN603-A9
CN620-10 CN610-10 (W) CN603-A10
CN620-11 CN610-11 (W) CN603-B1
CN620-12 CN610-12 (W) CN603-B2
CN620-13 CN610-13 (W) CN603-B3
CN620-14 CN610-14 (W) CN603-B4
CN620-15 CN610-15 (W) CN603-B5
CN620-16 CN610-16 (W) CN603-B6
CN620-17 CN610-17 (W) CN603-B7
CN620-18 CN610-18 (W) CN604-A2
CN620-19 CN610-19 (W) CN604-A3
CN620-20 CN610-20 (W) CN604-A4
CN620-21 CN610-21 (W) CN604-A5
CN620-22 CN610-22 (W) CN604-A6
CN620-23 CN610-23 (W) CN604-A7
CN620-24 CN610-24 (W) CN604-A8
CN620-25 CN610-25 (W) CN604-A9
CN620-26 CN610-26 (W) CN604-B1
CN620-27 CN610-27 (W) CN604-B2
CN620-28 CN610-28 (W) CN604-B3
CN620-29 CN610-29 (W) CN604-B4
CN620-30 CN610-30 (W) CN604-B5
CN620-31 CN610-31 (W) CN604-B6
CN620-32 CN610-32 (W) CN604-B7
CN620-33 CN610-33 (W) CN604-B8
CN620-34 CN610-34 (W) CN604-B9
A/D Conversion PCB
RST
GND-A
GND-A
OS
GND-A
GND-A
CCDCLK
SH
GND-A
SP
VPP(+12V)
VPP(+12V)
VMG(+24V)
GND-B
FLON\
[▼5]SNORIG
[▼5]SNOADF
[▼5]SNOTOP
[▼5]ADFEJCT
[▼5]SNADF
ORGSZ0
ORGSZ1
ORGSZ2
ORGSZ3
VCC(+5V)
VCC(+5V)
VCC(+5V)
GND-A
GND-A
GND-A
GND-A
COM-ADF
COM-ADF
COM-ADF
COM-ADF
COM-ADF
ADF-A
ADF-A
ADF-A
ADF-B\
ADF-B\
ADF-B\
ADF-B
ADF-B
ADF-B
ADF-A
ADF-A
ADF-A
GND-B
GND-B
GND-B
VMG(+24V)
VMG(+24V)
VMG(+24V)
VMG(+24V)
RESET\
SNORIG[▼5]
SNOADF[▼5]
SNOTOP[▼5]
GND-B
STM:CLK
STM:DIR
SELNA
STM:PD
STM:ICHG
STM:SEL
VEE(-12V)
S:READ\
VCC(+5V)
S:LSYNC\
VCC(+5V)
BAD0
GND-A
BAD2
GND-A
BAD4
ORGSZ0
ORGSZ2
GND-B
GND-B
GND-B
GND-B
VMG(+24V)
VMG(+24V)
VMG(+24V)
VMG(+24V)
ADFEJCT[▼5]
FLON\[▲5]
MODE
VCC(+5V)
CRGHP[▼5]
SNADCV[▲5]
ANGLES[▼5]
S:WINDOW
PLTSET[▲5]
PLTORIG[▼5]
VPP(+12V)
S:WRITE\
VCC(+5V)
S:CLK\
GND-A
BAD1
GND-A
BAD3
GND-A
BAD5
ORGSZ1
ORGSZ3
CN601-A1 CN402-B1
CN601-A2 CN402-B2
CN601-A3 CN402-B3
CN601-A4 CN402-B4
CN601-A5 CN402-B5
CN601-A6 CN402-B6
CN601-A7 CN402-B7
CN601-A8 CN402-B8
CN601-A9 CN402-B9
CN601-A10 CN402-B10
CN601-A11 CN402-B11
CN601-A12 CN402-B12
CN601-A13 CN402-B13
CN601-A14 CN402-B14
CN601-A15 CN402-B15
CN601-A16 CN402-B16
CN601-A17 CN402-B17
CN601-A18 CN402-B18
CN601-A19 CN402-B19
CN601-A20 CN402-B20
CN601-A21 CN402-B21
CN601-A22 CN402-B22
CN601-A23 CN402-B23
CN601-A24 CN402-B24
CN601-A25 CN402-B25
CN601-A26 CN402-B26
CN601-A27 CN402-B27
CN601-A28 CN402-B28
CN601-A29 CN402-B29
CN601-A30 CN402-B30
CN601-B1 CN402-A1
CN601-B2 CN402-A2
CN601-B3 CN402-A3
CN601-B4 CN402-A4
CN601-B5 CN402-A5
CN601-B6 CN402-A6
CN601-B7 CN402-A7
CN601-B8 CN402-A8
CN601-B9 CN402-A9
CN601-B10 CN402-A10
CN601-B11 CN402-A11
CN601-B12 CN402-A12
CN601-B13 CN402-A13
CN601-B14 CN402-A14
CN601-B15 CN402-A15
CN601-B16 CN402-A16
CN601-B17 CN402-A17
CN601-B18 CN402-A18
CN601-B19 CN402-A19
CN601-B20 CN402-A20
CN601-B21 CN402-A21
CN601-B22 CN402-A22
CN601-B23 CN402-A23
CN601-B24 CN402-A24
CN601-B25 CN402-A25
CN601-B26 CN402-A26
CN601-B27 CN402-A27
CN601-B28 CN402-A28
CN601-B29 CN402-A29
CN601-B30 CN402-A30
Image Processing PCB
GND-B
GND-B
GND-B
VMG(+24V)
VMG(+24V)
VMG(+24V)
VMG(+24V)
RESET\
[▼5]SNORIG
[▼5]SNOADF
[▼5]SNOTOP
GND-B
STM:CLK
STM:DIR
SELNA
STM:PD
STM:ICHG
STM:SEL
VEE(-12V)
S:READ\
VCC(+5V)
S:LSYNC\
VCC(+5V)
BAD0
GND-A
BAD2
GND-A
BAD4
ORGSZ0
ORGSZ2
GND-B
GND-B
GND-B
GND-B
VMG(+24V)
VMG(+24V)
VMG(+24V)
VMG(+24V)
[▼5]ADFEJCT
[▲5]FLON\
MODE
VCC(+5V)
[▼5]CRGHP
[▲5]SNADCV
[▼5]ANGLES
S:WINDOW
[▲5]PLTSET
[▼5]PLTORIG
VPP(+12V)
S:WRITE\
VCC(+5V)
S:CLK\
GND-A
BAD1
GND-A
BAD3
GND-A
BAD5
ORGSZ1
ORGSZ3

Section C


Main Control PCB
SEOH
VHD ON
VMG(+24V)
GND-B
VEE(-12V)
VLL(+12V)
VPP(+12V)
VCC(+5V)
GND-A
CN109-1 (G) CN502-10
CN109-2 (Y) CN503-20
CN109-3 (R) CN502-5
CN109-4 (C) CN502-9
CN109-5 (H) CN502-4
CN109-6 (P) CN502-1
CN109-7 (P) CN502-12
CN109-8 (Z) CN503-6
CN109-9 (B) CN503-9
PC:Main Motor
[▼24]Main Motor Reverce
[▲5]Paper Table UP
[▲5]Paper Table Down
[▼24]Relay :Common
[▼24]Safety SW
CN302-7 (W) CN105-9
CN302-6 (W) CN105-10
CN302-5 (W) CN105-11
CN302-4 (W) CN105-12
CN302-3 (W) CN105-13
CN302-2 (W) CN105-14
CN302-1 (W) CN105-15
AC Drive PCB
AC-H
AC-N
GND-B
GND-A
VMG(+24V)
SW-IN
SW-OUT
Motor :Main(+)
Motor :Main(-)
PC:Main Motor
Main Motor Reverse[▼24]
Paper Table Up[▲5]
Paper Table Down[▲5]
Relay :Common[▼24]
Safety SW[▼24]
Paper Table(+)
Paper Table(-)
CN303-4
CN303-6
CN304-1
CN304-2
CN303-2
CN303-1
CN301-1 (C)
CN301-2 (B)
CN301-3 (R)
CN301-5
CN301-4
Scanner Unit Safety SW TM501
Master Eject Unit Safety SW TM502
COM NO COM NO
T512 Test SW T511
T513 Test SW T514
COM NO
230V Only
Master Eject Unit Safety SW TM515
T516 T517
Interlock SW
CN143-2 CN143-1
CN159-2 CN159-1
Front Door Safety SW
Paper Table Safety SW
Power Supply Unit
AC-H
AC-N
GND-B
GND-A
VMG(+24V)
SEOH
VHD ON
VMG(+24V)
GND-B
VEE(-12V)
VLL(+12V)
VPP(+12V)
VCC(+5V)
GND-A
CN501-2
CN501-5
CN502-3
CN503-11
CN502-17
CN501-1
CN501-4
CN520-4
CN520-5
VMG(+24V)
GND-B
VCC(+5V)
GND-A
LCT (Option)
Main Drive Motor
Paper Table Drive Motor
M
M
Transformer
CN520-1
CN520-2
Circuit Breaker
T510
T507
T509
T508
Main Switch
T505
T506
T503
T504
Noise Filter
T501
T502
A/D Conversion PCB
GND-A
[▼5]CRGHP
VCC(+5V)
[▼5]ORIGINAL
GND-A
VCC(+5V)
GND-A
[▲5]PLTSET
GND-A
[▼5]PLATEN POSITION
VCC(+5V)
COM-CRGB
CRG-B
CRG-A
CRG-B
CRG-A
COM-CRGA
CN602-1 (B)
CN602-2 (W)
CN602-3 (W)
CN602-4 (W)
CN602-5 (W)
CN602-6 (W)
CN602-7 (W)
CN602-8 (W)
CN602-9 (W)
CN603-B8 (W)
CN603-B9 (W)
CN603-B10 (W)
CN605-1 (W)
CN605-2 (Z)
CN605-3 (R)
CN605-4 (C)
CN605-5 (Y)
CN605-6 (B)
CN612-2 CN612-3 CN612-1
CN613-2 CN613-3 CN613-4
CN614-1 CN614-2
CN618-3 CN618-2 CN618-1
CN611-1 CN611-2 CN611-3 CN611-4 CN611-5 CN611-6
GND OUT +5V
OUT GND +5V
GND OUT
GND OUT +5V
STM
SN:Scanner
SN:Original
SN:ADF Set
SN:Platen Cover Position
Scanner Stepping Motor

Section D

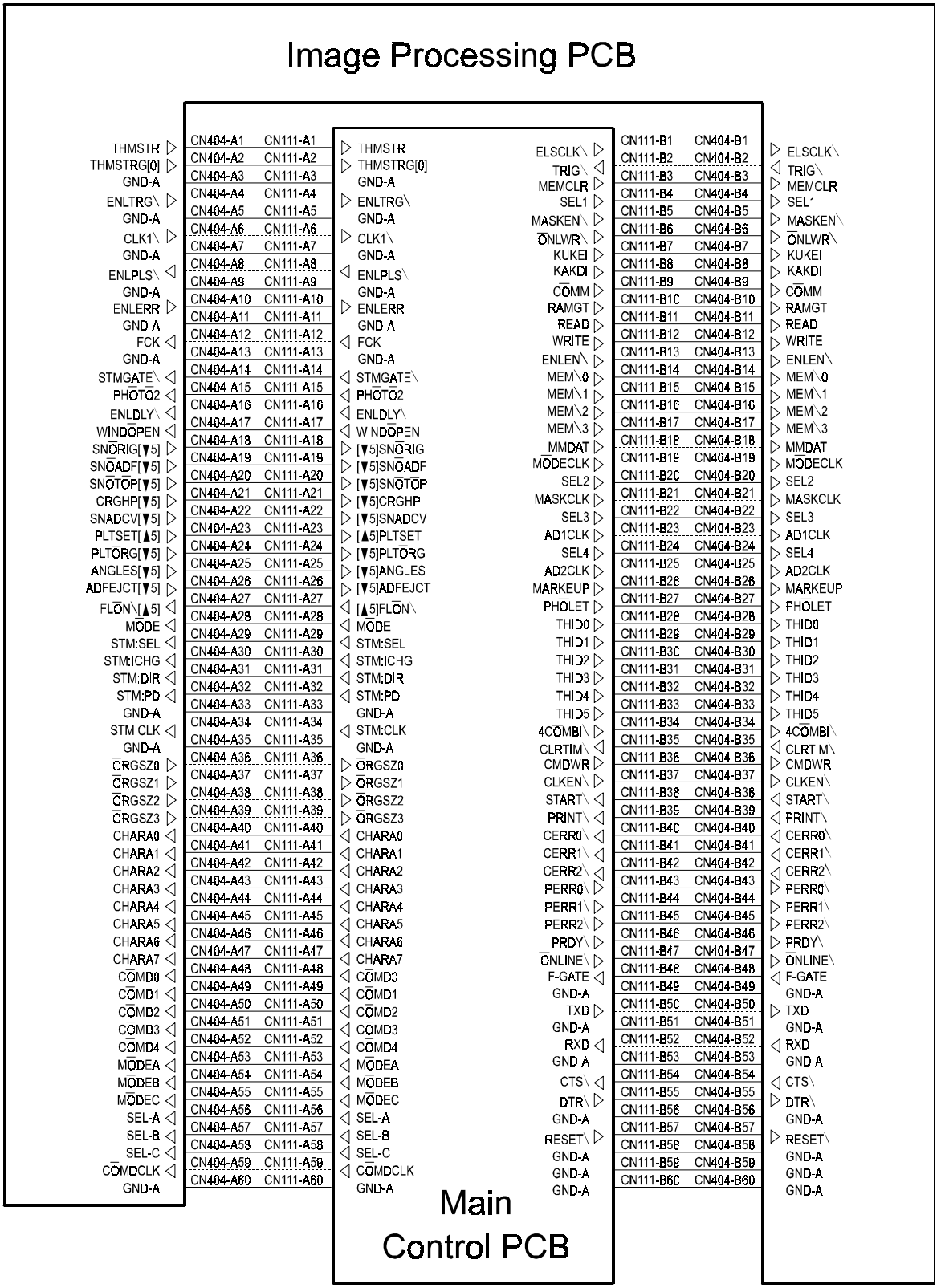


Image Processing PCB
THMSTR
THMSTRG[0]
GND-A
ENLTRG\
GND-A
CLK1\
GND-A
ENLPLS\
GND-A
ENLERR
GND-A
FCK
GND-A
STMGATE\
PHOTO2
ENLDLY\
WINDOPEN
SNORIG[▼5]
SNOADF[▼5]
SNOTOP[▼5]
CRGHP[▼5]
SNADCV[▼5]
PLTSET[▲5]
PLTORG[▼5]
ANGLES[▼5]
ADFEJCT[▼5]
FLON\[▲5]
MODE
STM:SEL
STM:ICHG
STM:DIR
STM:PD
GND-A
STM:CLK
GND-A
ORGSZ0
ORGSZ1
ORGSZ2
ORGSZ3
CHARA0
CHARA1
CHARA2
CHARA3
CHARA4
CHARA5
CHARA6
CHARA7
COMD0
COMD1
COMD2
COMD3
COMD4
MODEA
MODEB
MODEC
SEL-A
SEL-B
SEL-C
COMDCLK
GND-A
CN404-A1 CN111-A1
CN404-A2 CN111-A2
CN404-A3 CN111-A3
CN404-A4 CN111-A4
CN404-A5 CN111-A5
CN404-A6 CN111-A6
CN404-A7 CN111-A7
CN404-A8 CN111-A8
CN404-A9 CN111-A9
CN404-A10 CN111-A10
CN404-A11 CN111-A11
CN404-A12 CN111-A12
CN404-A13 CN111-A13
CN404-A14 CN111-A14
CN404-A15 CN111-A15
CN404-A16 CN111-A16
CN404-A17 CN111-A17
CN404-A18 CN111-A18
CN404-A19 CN111-A19
CN404-A20 CN111-A20
CN404-A21 CN111-A21
CN404-A22 CN111-A22
CN404-A23 CN111-A23
CN404-A24 CN111-A24
CN404-A25 CN111-A25
CN404-A26 CN111-A26
CN404-A27 CN111-A27
CN404-A28 CN111-A28
CN404-A29 CN111-A29
CN404-A30 CN111-A30
CN404-A31 CN111-A31
CN404-A32 CN111-A32
CN404-A33 CN111-A33
CN404-A34 CN111-A34
CN404-A35 CN111-A35
CN404-A36 CN111-A36
CN404-A37 CN111-A37
CN404-A38 CN111-A38
CN404-A39 CN111-A39
CN404-A40 CN111-A40
CN404-A41 CN111-A41
CN404-A42 CN111-A42
CN404-A43 CN111-A43
CN404-A44 CN111-A44
CN404-A45 CN111-A45
CN404-A46 CN111-A46
CN404-A47 CN111-A47
CN404-A48 CN111-A48
CN404-A49 CN111-A49
CN404-A50 CN111-A50
CN404-A51 CN111-A51
CN404-A52 CN111-A52
CN404-A53 CN111-A53
CN404-A54 CN111-A54
CN404-A55 CN111-A55
CN404-A56 CN111-A56
CN404-A57 CN111-A57
CN404-A58 CN111-A58
CN404-A59 CN111-A59
CN404-A60 CN111-A60
THMSTR
THMSTRG[0]
GND-A
ENLTRG\
GND-A
CLK1\
GND-A
ENLPLS\
GND-A
ENLERR
GND-A
FCK
GND-A
STMGATE\
PHOTO2
ENLDLY\
WINDOPEN
[▼5]SNORIG
[▼5]SNOADF
[▼5]SNOTOP
[▼5]CRGHP
[▼5]SNADCV
[▲5]PLTSET
[▼5]PLTORG
[▼5]ANGLES
[▼5]ADFEJCT
[▲5]FLON\
MODE
STM:SEL
STM:ICHG
STM:DIR
STM:PD
GND-A
STM:CLK
GND-A
ORGSZ0
ORGSZ1
ORGSZ2
ORGSZ3
CHARA0
CHARA1
CHARA2
CHARA3
CHARA4
CHARA5
CHARA6
CHARA7
COMD0
COMD1
COMD2
COMD3
COMD4
MODEA
MODEB
MODEC
SEL-A
SEL-B
SEL-C
COMDCLK
GND-A
Main
Control PCB
ELSCLK\
TRIG\
MEMCLR
SEL1
MASKEN\
ONLWR\
KUKEI
KAKDI
COMM
RAMGT
READ
WRITE
ENLEN\
MEM\0
MEM\1
MEM\2
MEM\3
MMDAT
MODECLK
SEL2
MASKCLK
SEL3
AD1CLK
SEL4
AD2CLK
MARKEUP
PHOLET
THID0
THID1
THID2
THID3
THID4
THID5
4COMBI\
CLRTIM\
CMDWR
CLKEN\
START\
PRINT\
CERR0\
CERR1\
CERR2\
PERR0\
PERR1\
PERR2\
PRDY\
ONLINE\
F-GATE
GND-A
TXD
GND-A
RXD
GND-A
CTS\
DTR\
GND-A
RESET\
GND-A
GND-A
GND-A
CN111-B1 CN404-B1
CN111-B2 CN404-B2
CN111-B3 CN404-B3
CN111-B4 CN404-B4
CN111-B5 CN404-B5
CN111-B6 CN404-B6
CN111-B7 CN404-B7
CN111-B8 CN404-B8
CN111-B9 CN404-B9
CN111-B10 CN404-B10
CN111-B11 CN404-B11
CN111-B12 CN404-B12
CN111-B13 CN404-B13
CN111-B14 CN404-B14
CN111-B15 CN404-B15
CN111-B16 CN404-B16
CN111-B17 CN404-B17
CN111-B18 CN404-B18
CN111-B19 CN404-B19
CN111-B20 CN404-B20
CN111-B21 CN404-B21
CN111-B22 CN404-B22
CN111-B23 CN404-B23
CN111-B24 CN404-B24
CN111-B25 CN404-B25
CN111-B26 CN404-B26
CN111-B27 CN404-B27
CN111-B28 CN404-B28
CN111-B29 CN404-B29
CN111-B30 CN404-B30
CN111-B31 CN404-B31
CN111-B32 CN404-B32
CN111-B33 CN404-B33
CN111-B34 CN404-B34
CN111-B35 CN404-B35
CN111-B36 CN404-B36
CN111-B37 CN404-B37
CN111-B38 CN404-B38
CN111-B39 CN404-B39
CN111-B40 CN404-B40
CN111-B41 CN404-B41
CN111-B42 CN404-B42
CN111-B43 CN404-B43
CN111-B44 CN404-B44
CN111-B45 CN404-B45
CN111-B46 CN404-B46
CN111-B47 CN404-B47
CN111-B48 CN404-B48
CN111-B49 CN404-B49
CN111-B50 CN404-B50
CN111-B51 CN404-B51
CN111-B52 CN404-B52
CN111-B53 CN404-B53
CN111-B54 CN404-B54
CN111-B55 CN404-B55
CN111-B56 CN404-B56
CN111-B57 CN404-B57
CN111-B58 CN404-B58
CN111-B59 CN404-B59
CN111-B60 CN404-B60
ELSCLK\
TRIG\
MEMCLR
SEL1
MASKEN\
ONLWR\
KUKEI
KAKDI
COMM
RAMGT
READ
WRITE
ENLEN\
MEM\0
MEM\1
MEM\2
MEM\3
MMDAT
MODECLK
SEL2
MASKCLK
SEL3
AD1CLK
SEL4
AD2CLK
MARKEUP
PHOLET
THID0
THID1
THID2
THID3
THID4
THID5
4COMBI\
CLRTIM\
CMDWR
CLKEN\
START\
PRINT\
CERR0\
CERR1\
CERR2\
PERR0\
PERR1\
PERR2\
PRDY\
ONLINE\
F-GATE
GND-A
TXD
GND-A
RXD
GND-A
CTS\
DTR\
GND-A
RESET\
GND-A
GND-A
GND-A

Section E

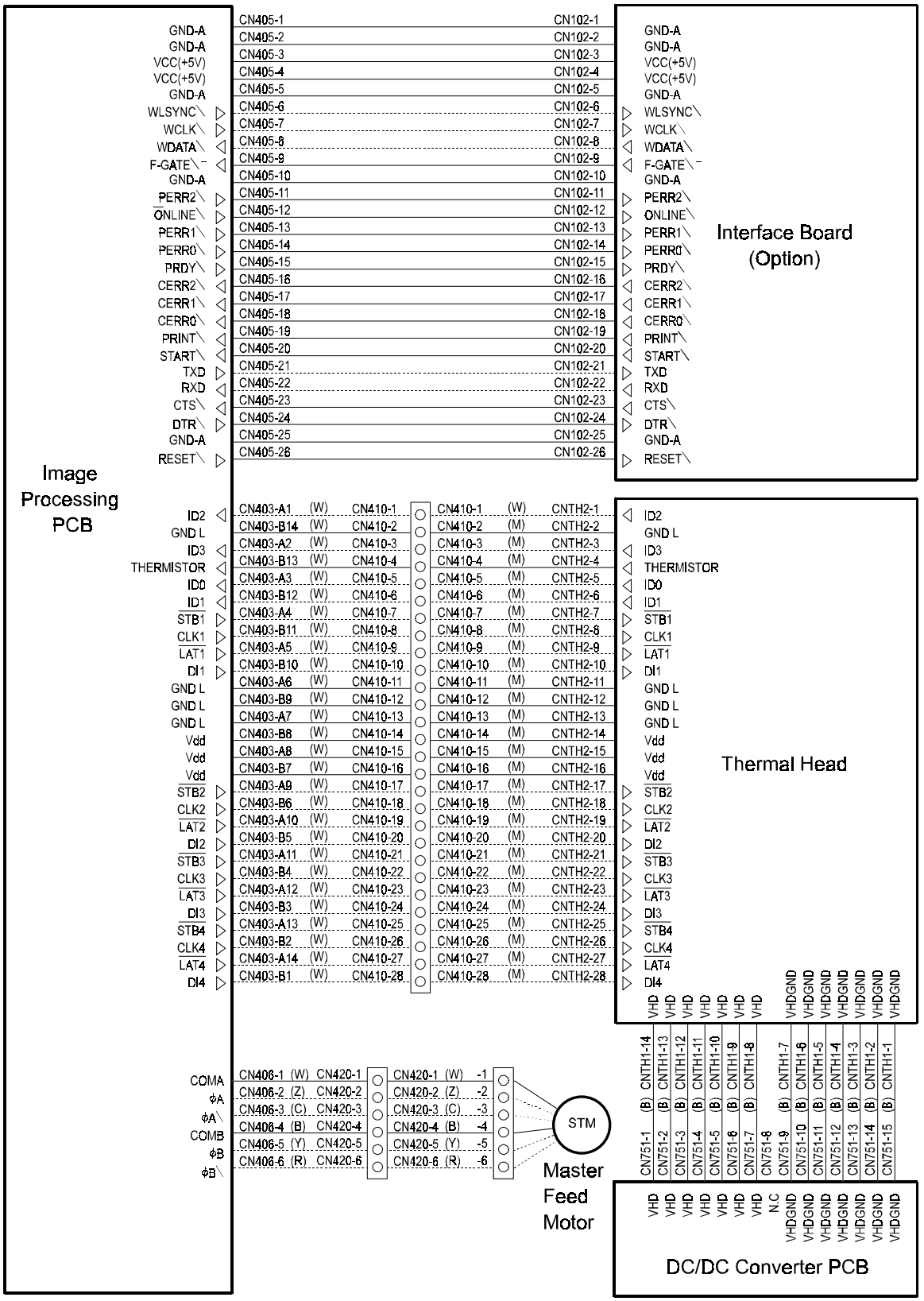
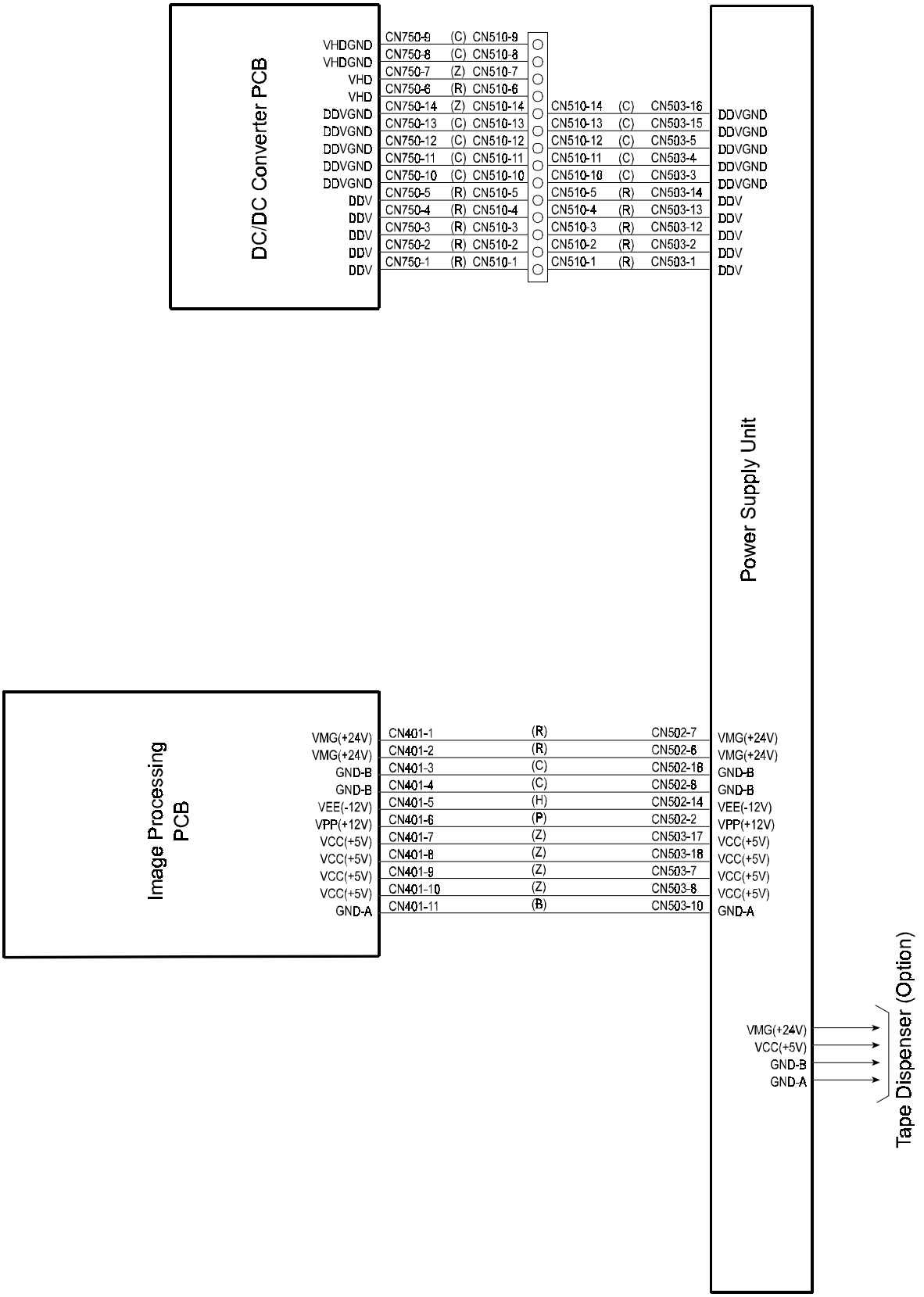
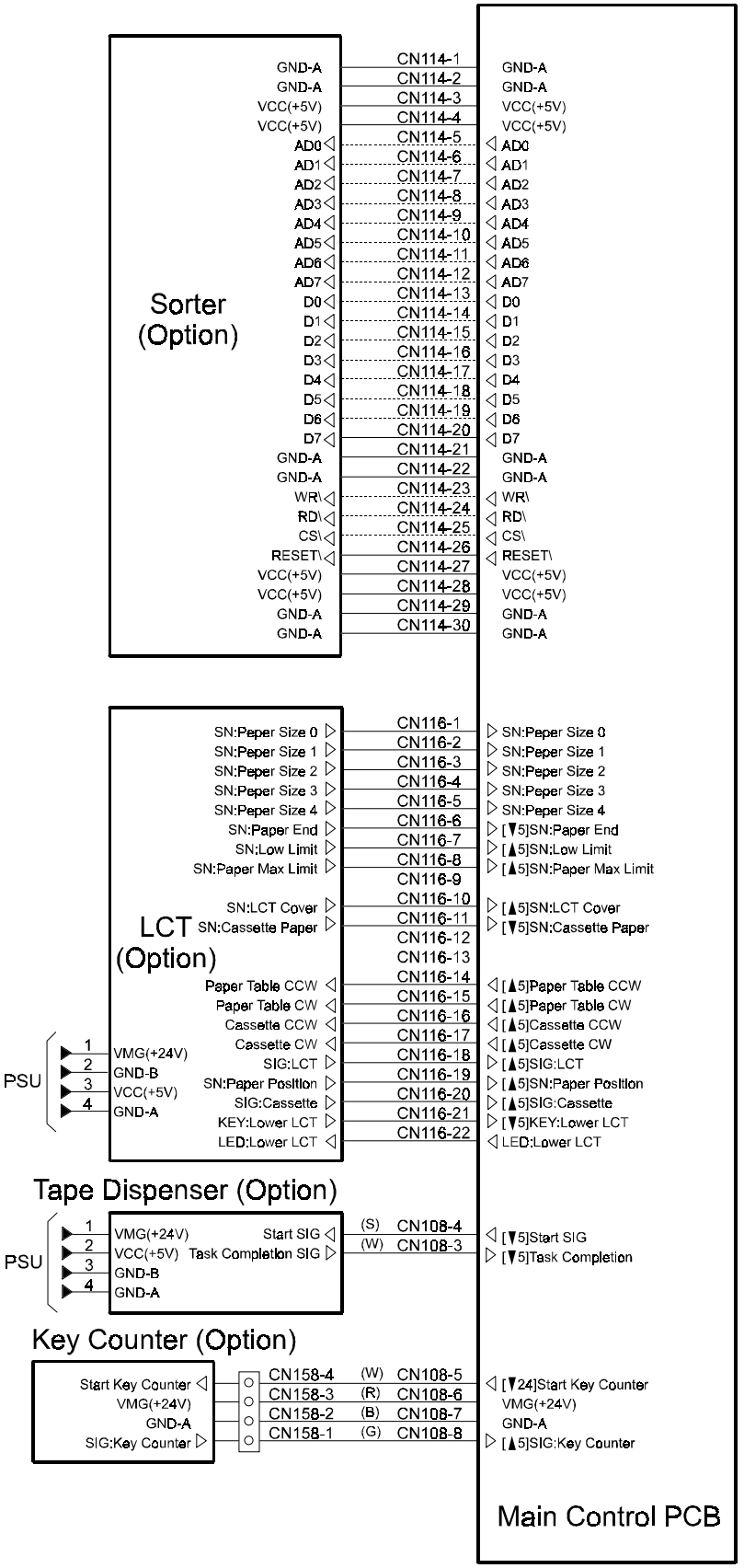


Image Processing PCB
GND-A
GND-A
VCC(+5V)
VCC(+5V)
GND-A
WLSYNC
WCLK
WDATA
F-GATE
GND-A
PERR2
ONLINE
PERR1
PERR0
PRDY
CERR2
CERR1
CERR0
PRINT
START
TXD
RXD
CTS
DTR
GND-A
RESET
CN405-1 CN102-1
CN405-2 CN102-2
CN405-3 CN102-3
CN405-4 CN102-4
CN405-5 CN102-5
CN405-6 CN102-6
CN405-7 CN102-7
CN405-8 CN102-8
CN405-9 CN102-9
CN405-10 CN102-10
CN405-11 CN102-11
CN405-12 CN102-12
CN405-13 CN102-13
CN405-14 CN102-14
CN405-15 CN102-15
CN405-16 CN102-16
CN405-17 CN102-17
CN405-18 CN102-18
CN405-19 CN102-19
CN405-20 CN102-20
CN405-21 CN102-21
CN405-22 CN102-22
CN405-23 CN102-23
CN405-24 CN102-24
CN405-25 CN102-25
CN405-26 CN102-26
Interface Board (Option)
GND-A
GND-A
VCC(+5V)
VCC(+5V)
GND-A
WLSYNC
WCLK
WDATA
F-GATE
GND-A
PERR2
ONLINE
PERR1
PERR0
PRDY
CERR2
CERR1
CERR0
PRINT
START
TXD
RXD
CTS
DTR
GND-A
RESET
ID2
GND L
ID3
THERMISTOR
ID0
ID1
STB1
CLK1
LAT1
DI1
GND L
GND L
GND L
Vdd
Vdd
Vdd
STB2
CLK2
LAT2
DI2
STB3
CLK3
LAT3
DI3
STB4
CLK4
LAT4
DI4
CN403-A1 (W) CN410-1
CN403-B14 (W) CN410-2
CN403-A2 (W) CN410-3
CN403-B13 (W) CN410-4
CN403-A3 (W) CN410-5
CN403-B12 (W) CN410-6
CN403-A4 (W) CN410-7
CN403-B11 (W) CN410-8
CN403-A5 (W) CN410-9
CN403-B10 (W) CN410-10
CN403-A6 (W) CN410-11
CN403-B9 (W) CN410-12
CN403-A7 (W) CN410-13
CN403-B8 (W) CN410-14
CN403-A8 (W) CN410-15
CN403-B7 (W) CN410-16
CN403-A9 (W) CN410-17
CN403-B6 (W) CN410-18
CN403-A10 (W) CN410-19
CN403-B5 (W) CN410-20
CN403-A11 (W) CN410-21
CN403-B4 (W) CN410-22
CN403-A12 (W) CN410-23
CN403-B3 (W) CN410-24
CN403-A13 (W) CN410-25
CN403-B2 (W) CN410-26
CN403-A14 (W) CN410-27
CN403-B1 (W) CN410-28
CN410-1 (W) CNTH2-1
CN410-2 (M) CNTH2-2
CN410-3 (M) CNTH2-3
CN410-4 (M) CNTH2-4
CN410-5 (M) CNTH2-5
CN410-6 (M) CNTH2-6
CN410-7 (M) CNTH2-7
CN410-8 (M) CNTH2-8
CN410-9 (M) CNTH2-9
CN410-10 (M) CNTH2-10
CN410-11 (M) CNTH2-11
CN410-12 (M) CNTH2-12
CN410-13 (M) CNTH2-13
CN410-14 (M) CNTH2-14
CN410-15 (M) CNTH2-15
CN410-16 (M) CNTH2-16
CN410-17 (M) CNTH2-17
CN410-18 (M) CNTH2-18
CN410-19 (M) CNTH2-19
CN410-20 (M) CNTH2-20
CN410-21 (M) CNTH2-21
CN410-22 (M) CNTH2-22
CN410-23 (M) CNTH2-23
CN410-24 (M) CNTH2-24
CN410-25 (M) CNTH2-25
CN410-26 (M) CNTH2-26
CN410-27 (M) CNTH2-27
CN410-28 (M) CNTH2-28
Thermal Head
ID2
GND L
ID3
THERMISTOR
ID0
ID1
STB1
CLK1
LAT1
DI1
GND L
GND L
GND L
Vdd
Vdd
Vdd
STB2
CLK2
LAT2
DI2
STB3
CLK3
LAT3
DI3
STB4
CLK4
LAT4
DI4
VHD VHD VHD VHD VHD VHD VHD
VHDGND VHDGND VHDGND VHDGND VHDGND VHDGND VHDGND
COMA
ϕA
ϕA
COMB
ϕB
ϕB
CN406-1 (W) CN420-1
CN406-2 (Z) CN420-2
CN406-3 (C) CN420-3
CN406-4 (B) CN420-4
CN406-5 (Y) CN420-5
CN406-6 (R) CN420-6
CN420-1 (W) -1
CN420-2 (Z) -2
CN420-3 (C) -3
CN420-4 (B) -4
CN420-5 (Y) -5
CN420-6 (R) -6
STM
Master Feed Motor
CN751-1 (B) CNTH1-14
CN751-2 (B) CNTH1-13
CN751-3 (B) CNTH1-12
CN751-4 (B) CNTH1-11
CN751-5 (B) CNTH1-10
CN751-6 (B) CNTH1-9
CN751-7 (B) CNTH1-8
CN751-8 N.C
CN751-9 (B) CNTH1-7
CN751-10 (B) CNTH1-6
CN751-11 (B) CNTH1-5
CN751-12 (B) CNTH1-4
CN751-13 (B) CNTH1-3
CN751-14 (B) CNTH1-2
CN751-15 (B) CNTH1-1
VHD VHD VHD VHD VHD VHD VHD N.C VHDGND VHDGND VHDGND VHDGND VHDGND VHDGND VHDGND
DC/DC Converter PCB

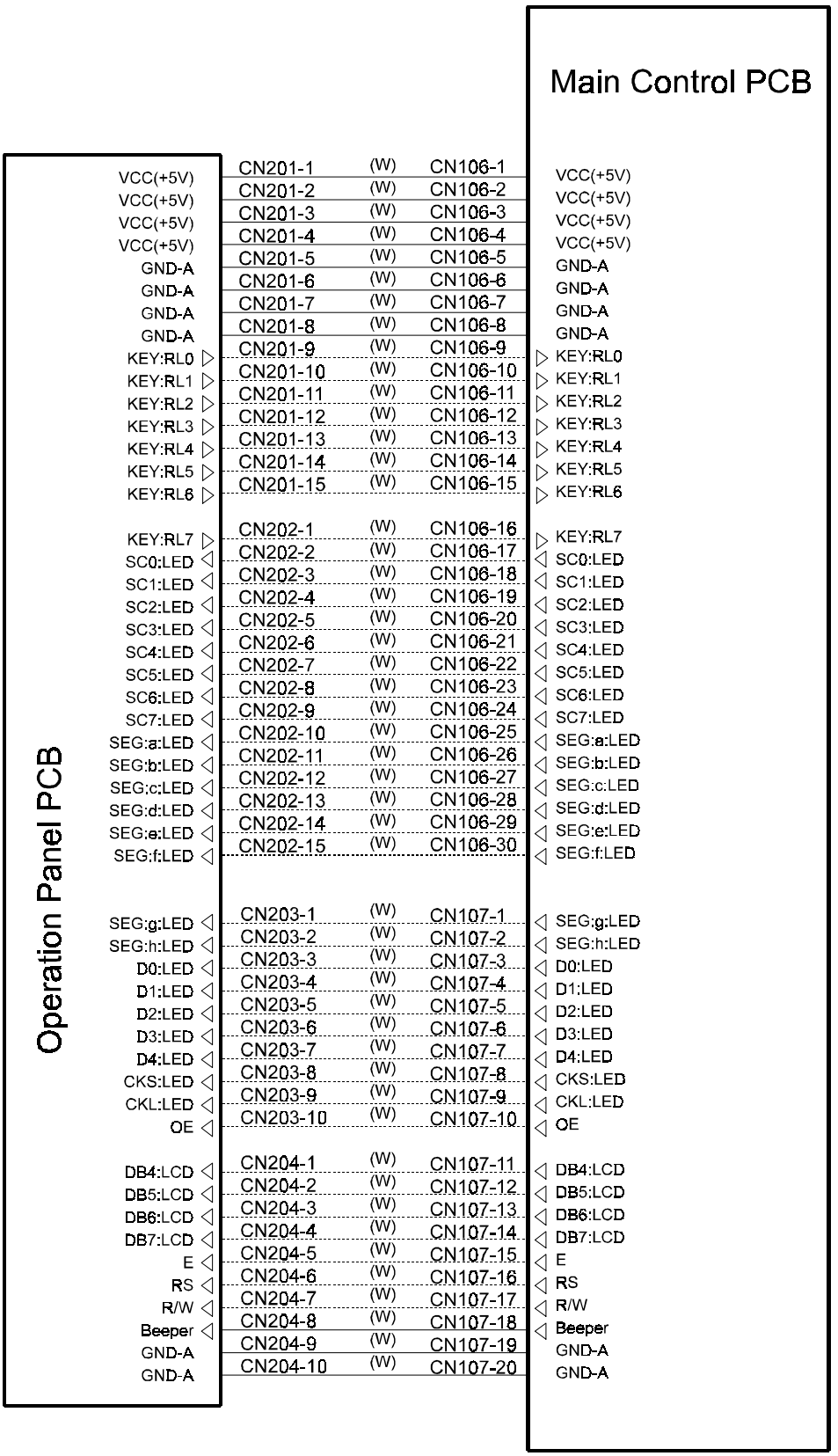
Section F


DC/DC Converter PCB
VHDGND
VHDGND
VHD
VHD
DDVGND
DDVGND
DDVGND
DDVGND
DDVGND
DDV
DDV
DDV
DDV
DDV
CN750-9 (C) CN510-9
CN750-8 (C) CN510-8
CN750-7 (Z) CN510-7
CN750-6 (R) CN510-6
CN750-14 (Z) CN510-14
CN750-13 (C) CN510-13
CN750-12 (C) CN510-12
CN750-11 (C) CN510-11
CN750-10 (C) CN510-10
CN750-5 (R) CN510-5
CN750-4 (R) CN510-4
CN750-3 (R) CN510-3
CN750-2 (R) CN510-2
CN750-1 (R) CN510-1
CN510-14 (C) CN503-16
CN510-13 (C) CN503-15
CN510-12 (C) CN503-5
CN510-11 (C) CN503-4
CN510-10 (C) CN503-3
CN510-5 (R) CN503-14
CN510-4 (R) CN503-13
CN510-3 (R) CN503-12
CN510-2 (R) CN503-2
CN510-1 (R) CN503-1
DDVGND
DDVGND
DDVGND
DDVGND
DDVGND
DDV
DDV
DDV
DDV
DDV
Power Supply Unit
Image Processing PCB
VMG(+24V)
VMG(+24V)
GND-B
GND-B
VEE(-12V)
VPP(+12V)
VCC(+5V)
VCC(+5V)
VCC(+5V)
VCC(+5V)
GND-A
CN401-1 (R) CN502-7
CN401-2 (R) CN502-6
CN401-3 (C) CN502-18
CN401-4 (C) CN502-8
CN401-5 (H) CN502-14
CN401-6 (P) CN502-2
CN401-7 (Z) CN503-17
CN401-8 (Z) CN503-18
CN401-9 (Z) CN503-7
CN401-10 (Z) CN503-8
CN401-11 (B) CN503-10
VMG(+24V)
VMG(+24V)
GND-B
GND-B
VEE(-12V)
VPP(+12V)
VCC(+5V)
VCC(+5V)
VCC(+5V)
VCC(+5V)
GND-A
VMG(+24V)
VCC(+5V)
GND-B
GND-A
Tape Dispenser (Option)

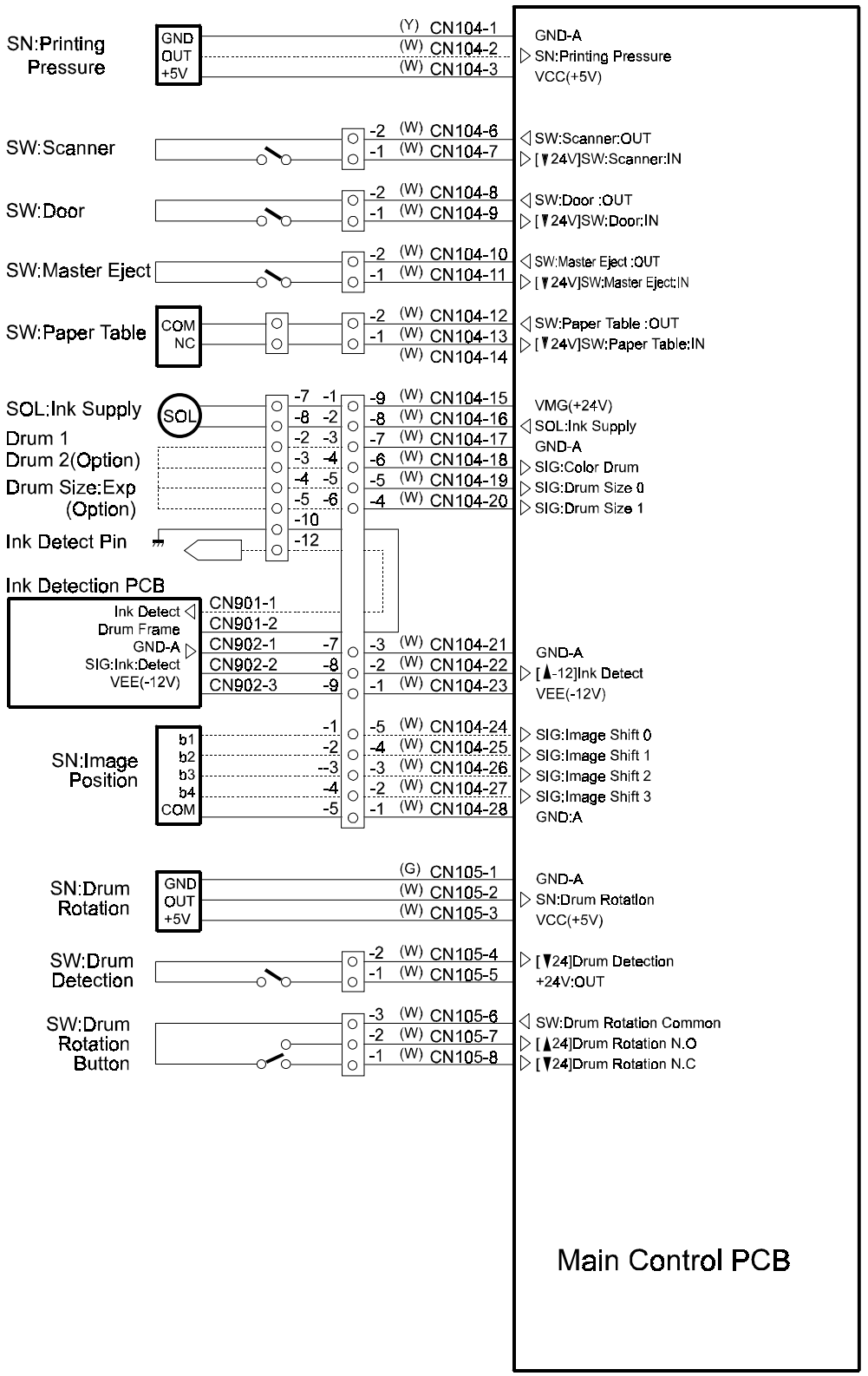
Section G


Sorter
(Option)
GND-A
GND-A
VCC(+5V)
VCC(+5V)
AD0
AD1
AD2
AD3
AD4
AD5
AD6
AD7
D0
D1
D2
D3
D4
D5
D6
D7
GND-A
GND-A
WR\
RD\
CS\
RESET\
VCC(+5V)
VCC(+5V)
GND-A
GND-A
CN114-1
CN114-2
CN114-3
CN114-4
CN114-5
CN114-6
CN114-7
CN114-8
CN114-9
CN114-10
CN114-11
CN114-12
CN114-13
CN114-14
CN114-15
CN114-16
CN114-17
CN114-18
CN114-19
CN114-20
CN114-21
CN114-22
CN114-23
CN114-24
CN114-25
CN114-26
CN114-27
CN114-28
CN114-29
CN114-30
GND-A
GND-A
VCC(+5V)
VCC(+5V)
AD0
AD1
AD2
AD3
AD4
AD5
AD6
AD7
D0
D1
D2
D3
D4
D5
D6
D7
GND-A
GND-A
WR\
RD\
CS\
RESET\
VCC(+5V)
VCC(+5V)
GND-A
GND-A
LCT
(Option)
SN:Peper Size 0
SN:Peper Size 1
SN:Peper Size 2
SN:Peper Size 3
SN:Peper Size 4
SN:Paper End
SN:Low Limit
SN:Paper Max Limit
SN:LCT Cover
SN:Cassette Paper
Paper Table CCW
Paper Table CW
Cassette CCW
Cassette CW
SIG:LCT
SN:Paper Position
SIG:Cassette
KEY:Lower LCT
LED:Lower LCT
CN116-1
CN116-2
CN116-3
CN116-4
CN116-5
CN116-6
CN116-7
CN116-8
CN116-9
CN116-10
CN116-11
CN116-12
CN116-13
CN116-14
CN116-15
CN116-16
CN116-17
CN116-18
CN116-19
CN116-20
CN116-21
CN116-22
SN:Peper Size 0
SN:Peper Size 1
SN:Peper Size 2
SN:Peper Size 3
SN:Peper Size 4
[▼5]SN:Paper End
[▲5]SN:Low Limit
[▲5]SN:Paper Max Limit
[▲5]SN:LCT Cover
[▼5]SN:Cassette Paper
[▲5]Paper Table CCW
[▲5]Paper Table CW
[▲5]Cassette CCW
[▲5]Cassette CW
[▲5]SIG:LCT
[▲5]SN:Paper Position
[▲5]SIG:Cassette
[▼5]KEY:Lower LCT
LED:Lower LCT
PSU
1
2
3
4
VMG(+24V)
GND-B
VCC(+5V)
GND-A
Tape Dispenser (Option)
PSU
1
2
3
4
VMG(+24V)
VCC(+5V)
GND-B
GND-A
Start SIG
Task Completion SIG
(S)
(W)
CN108-4
CN108-3
[▼5]Start SIG
[▼5]Task Completion
Key Counter (Option)
Start Key Counter
VMG(+24V)
GND-A
SIG:Key Counter
CN158-4
CN158-3
CN158-2
CN158-1
(W)
(R)
(B)
(G)
CN108-5
CN108-6
CN108-7
CN108-8
[▼24]Start Key Counter
VMG(+24V)
GND-A
[▲5]SIG:Key Counter
Main Control PCB

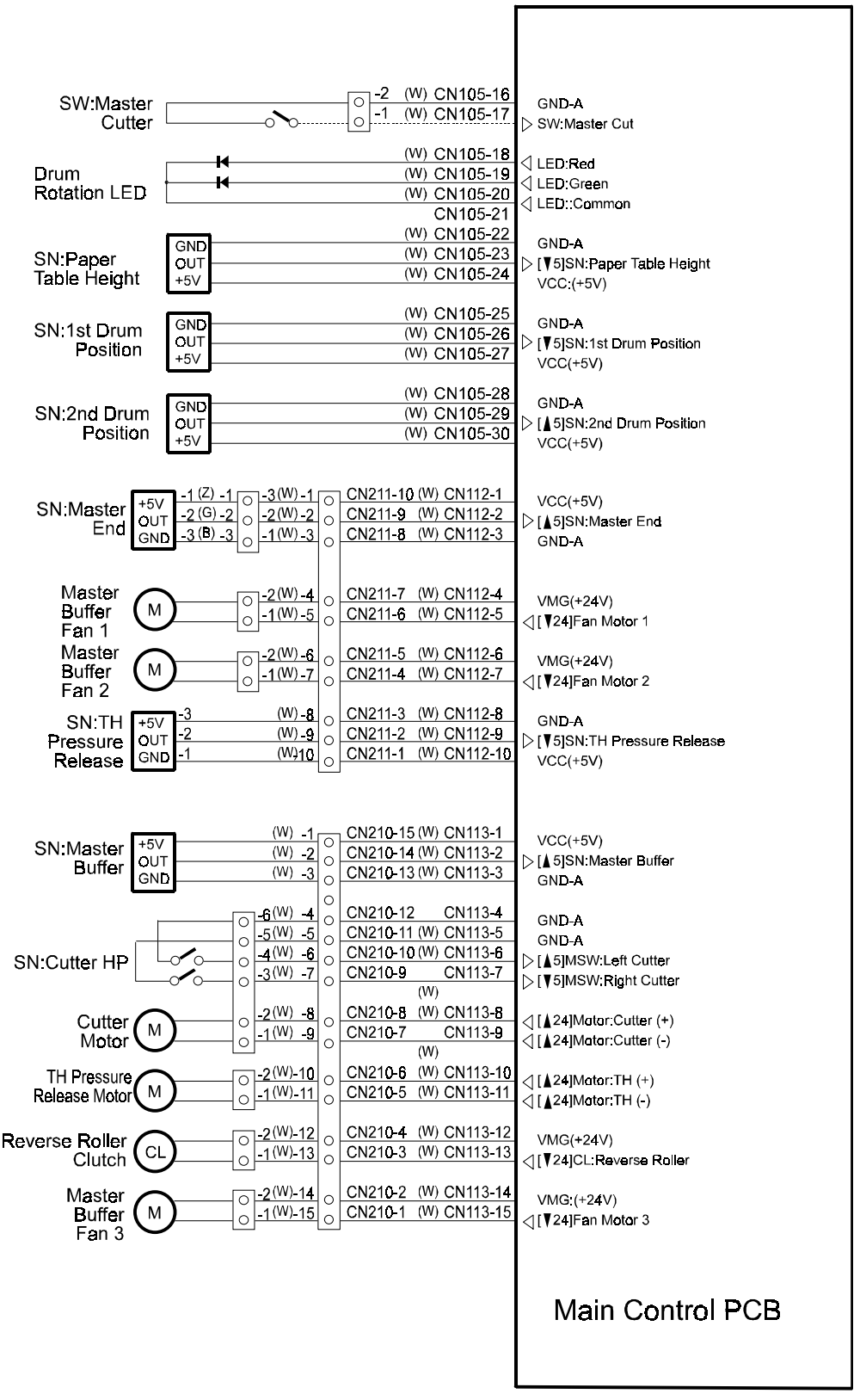
Section H


Main Control PCB
Operation Panel PCB
CN201-1 (W) CN106-1 VCC(+5V) VCC(+5V)
CN201-2 (W) CN106-2 VCC(+5V) VCC(+5V)
CN201-3 (W) CN106-3 VCC(+5V) VCC(+5V)
CN201-4 (W) CN106-4 VCC(+5V) VCC(+5V)
CN201-5 (W) CN106-5 GND-A GND-A
CN201-6 (W) CN106-6 GND-A GND-A
CN201-7 (W) CN106-7 GND-A GND-A
CN201-8 (W) CN106-8 GND-A GND-A
CN201-9 (W) CN106-9 KEY:RL0 KEY:RL0
CN201-10 (W) CN106-10 KEY:RL1 KEY:RL1
CN201-11 (W) CN106-11 KEY:RL2 KEY:RL2
CN201-12 (W) CN106-12 KEY:RL3 KEY:RL3
CN201-13 (W) CN106-13 KEY:RL4 KEY:RL4
CN201-14 (W) CN106-14 KEY:RL5 KEY:RL5
CN201-15 (W) CN106-15 KEY:RL6 KEY:RL6
CN202-1 (W) CN106-16 KEY:RL7 KEY:RL7
CN202-2 (W) CN106-17 SC0:LED SC0:LED
CN202-3 (W) CN106-18 SC1:LED SC1:LED
CN202-4 (W) CN106-19 SC2:LED SC2:LED
CN202-5 (W) CN106-20 SC3:LED SC3:LED
CN202-6 (W) CN106-21 SC4:LED SC4:LED
CN202-7 (W) CN106-22 SC5:LED SC5:LED
CN202-8 (W) CN106-23 SC6:LED SC6:LED
CN202-9 (W) CN106-24 SC7:LED SC7:LED
CN202-10 (W) CN106-25 SEG:a:LED SEG:a:LED
CN202-11 (W) CN106-26 SEG:b:LED SEG:b:LED
CN202-12 (W) CN106-27 SEG:c:LED SEG:c:LED
CN202-13 (W) CN106-28 SEG:d:LED SEG:d:LED
CN202-14 (W) CN106-29 SEG:e:LED SEG:e:LED
CN202-15 (W) CN106-30 SEG:f:LED SEG:f:LED
CN203-1 (W) CN107-1 SEG:g:LED SEG:g:LED
CN203-2 (W) CN107-2 SEG:h:LED SEG:h:LED
CN203-3 (W) CN107-3 D0:LED D0:LED
CN203-4 (W) CN107-4 D1:LED D1:LED
CN203-5 (W) CN107-5 D2:LED D2:LED
CN203-6 (W) CN107-6 D3:LED D3:LED
CN203-7 (W) CN107-7 D4:LED D4:LED
CN203-8 (W) CN107-8 CKS:LED CKS:LED
CN203-9 (W) CN107-9 CKL:LED CKL:LED
CN203-10 (W) CN107-10 OE OE
CN204-1 (W) CN107-11 DB4:LCD DB4:LCD
CN204-2 (W) CN107-12 DB5:LCD DB5:LCD
CN204-3 (W) CN107-13 DB6:LCD DB6:LCD
CN204-4 (W) CN107-14 DB7:LCD DB7:LCD
CN204-5 (W) CN107-15 E E
CN204-6 (W) CN107-16 RS RS
CN204-7 (W) CN107-17 R/W R/W
CN204-8 (W) CN107-18 Beeper Beeper
CN204-9 (W) CN107-19 GND-A GND-A
CN204-10 (W) CN107-20 GND-A GND-A

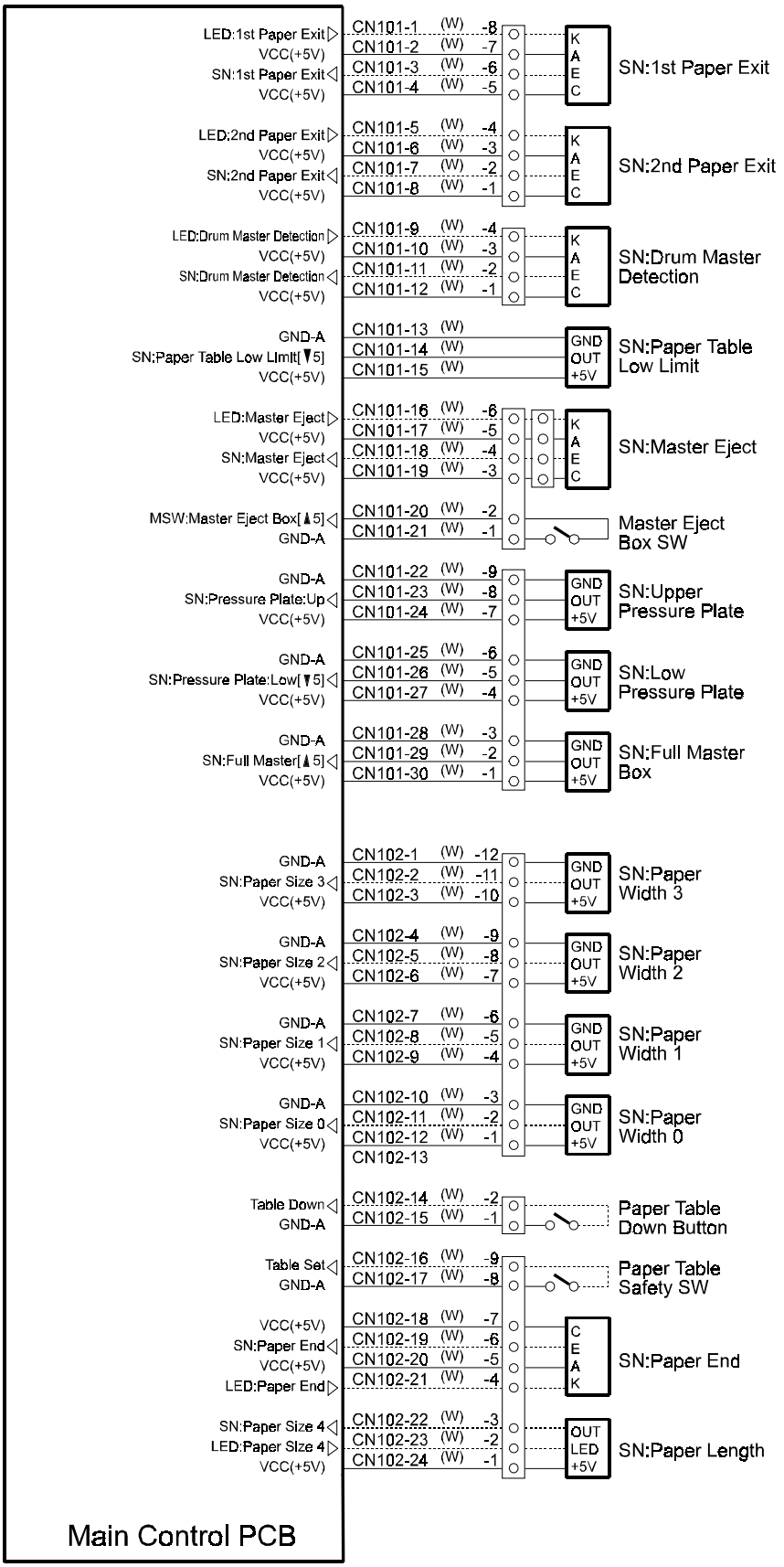
Section I


SN:Printing Pressure
GND
OUT
+5V
(Y) CN104-1
(W) CN104-2
(W) CN104-3
GND-A
SN:Printing Pressure
VCC(+5V)
SW:Scanner
-2 (W) CN104-6
-1 (W) CN104-7
SW:Scanner:OUT
[▼24V]SW:Scanner:IN
SW:Door
-2 (W) CN104-8
-1 (W) CN104-9
SW:Door :OUT
[▼24V]SW:Door:IN
SW:Master Eject
-2 (W) CN104-10
-1 (W) CN104-11
SW:Master Eject :OUT
[▼24V]SW:Master Eject:IN
SW:Paper Table
COM
NC
-2 (W) CN104-12
-1 (W) CN104-13
(W) CN104-14
SW:Paper Table :OUT
[▼24V]SW:Paper Table:IN
SOL:Ink Supply
Drum 1
Drum 2(Option)
Drum Size:Exp
(Option)
Ink Detect Pin
SOL
-7 -1
-8 -2
-2 -3
-3 -4
-4 -5
-5 -6
-10
-12
-9 (W) CN104-15
-8 (W) CN104-16
-7 (W) CN104-17
-6 (W) CN104-18
-5 (W) CN104-19
-4 (W) CN104-20
VMG(+24V)
SOL:Ink Supply
GND-A
SIG:Color Drum
SIG:Drum Size 0
SIG:Drum Size 1
Ink Detection PCB
Ink Detect
Drum Frame
GND-A
SIG:Ink:Detect
VEE(-12V)
CN901-1
CN901-2
CN902-1
CN902-2
CN902-3
-7
-8
-9
-3 (W) CN104-21
-2 (W) CN104-22
-1 (W) CN104-23
GND-A
[▲-12]Ink Detect
VEE(-12V)
SN:Image Position
b1
b2
b3
b4
COM
-1
-2
--3
-4
-5
-5 (W) CN104-24
-4 (W) CN104-25
-3 (W) CN104-26
-2 (W) CN104-27
-1 (W) CN104-28
SIG:Image Shift 0
SIG:Image Shift 1
SIG:Image Shift 2
SIG:Image Shift 3
GND:A
SN:Drum Rotation
GND
OUT
+5V
(G) CN105-1
(W) CN105-2
(W) CN105-3
GND-A
SN:Drum Rotation
VCC(+5V)
SW:Drum Detection
-2 (W) CN105-4
-1 (W) CN105-5
[▼24]Drum Detection
+24V:OUT
SW:Drum Rotation Button
-3 (W) CN105-6
-2 (W) CN105-7
-1 (W) CN105-8
SW:Drum Rotation Common
[▲24]Drum Rotation N.O
[▼24]Drum Rotation N.C
Main Control PCB

Section J


SW:Master Cutter
-2 (W) CN105-16
-1 (W) CN105-17
GND-A
SW:Master Cut
Drum Rotation LED
(W) CN105-18
(W) CN105-19
(W) CN105-20
CN105-21
LED:Red
LED:Green
LED::Common
SN:Paper Table Height
GND
OUT
+5V
(W) CN105-22
(W) CN105-23
(W) CN105-24
GND-A
[▼5]SN:Paper Table Height
VCC:(+5V)
SN:1st Drum Position
(W) CN105-25
(W) CN105-26
(W) CN105-27
GND-A
[▼5]SN:1st Drum Position
VCC(+5V)
SN:2nd Drum Position
(W) CN105-28
(W) CN105-29
(W) CN105-30
GND-A
[▲5]SN:2nd Drum Position
VCC(+5V)
SN:Master End
+5V
OUT
GND
-1 (Z) -1
-2 (G) -2
-3 (B) -3
-3 (W) -1
-2 (W) -2
-1 (W) -3
CN211-10 (W) CN112-1
CN211-9 (W) CN112-2
CN211-8 (W) CN112-3
VCC(+5V)
[▲5]SN:Master End
GND-A
Master Buffer Fan 1
M
-2 (W) -4
-1 (W) -5
CN211-7 (W) CN112-4
CN211-6 (W) CN112-5
VMG(+24V)
[▼24]Fan Motor 1
Master Buffer Fan 2
M
-2 (W) -6
-1 (W) -7
CN211-5 (W) CN112-6
CN211-4 (W) CN112-7
VMG(+24V)
[▼24]Fan Motor 2
SN:TH Pressure Release
+5V
OUT
GND
-3 (W) -8
-2 (W) -9
-1 (W) -10
CN211-3 (W) CN112-8
CN211-2 (W) CN112-9
CN211-1 (W) CN112-10
GND-A
[▼5]SN:TH Pressure Release
VCC(+5V)
SN:Master Buffer
+5V
OUT
GND
(W) -1
(W) -2
(W) -3
CN210-15 (W) CN113-1
CN210-14 (W) CN113-2
CN210-13 (W) CN113-3
VCC(+5V)
[▲5]SN:Master Buffer
GND-A
SN:Cutter HP
-6 (W) -4
-5 (W) -5
-4 (W) -6
-3 (W) -7
CN210-12 CN113-4
CN210-11 (W) CN113-5
CN210-10 (W) CN113-6
CN210-9 CN113-7
(W)
GND-A
GND-A
[▲5]MSW:Left Cutter
[▼5]MSW:Right Cutter
Cutter Motor
M
-2 (W) -8
-1 (W) -9
CN210-8 (W) CN113-8
CN210-7 CN113-9
(W)
[▲24]Motor:Cutter (+)
[▲24]Motor:Cutter (-)
TH Pressure Release Motor
M
-2 (W)-10
-1 (W)-11
CN210-6 (W) CN113-10
CN210-5 (W) CN113-11
[▲24]Motor:TH (+)
[▲24]Motor:TH (-)
Reverse Roller Clutch
CL
-2 (W)-12
-1 (W)-13
CN210-4 (W) CN113-12
CN210-3 (W) CN113-13
VMG(+24V)
[▼24]CL:Reverse Roller
Master Buffer Fan 3
M
-2 (W)-14
-1 (W)-15
CN210-2 (W) CN113-14
CN210-1 (W) CN113-15
VMG:(+24V)
[▼24]Fan Motor 3
Main Control PCB

Section K


LED:1st Paper Exit
VCC(+5V)
SN:1st Paper Exit
VCC(+5V)
CN101-1 (W) -8
CN101-2 (W) -7
CN101-3 (W) -6
CN101-4 (W) -5
K A E C
SN:1st Paper Exit
LED:2nd Paper Exit
VCC(+5V)
SN:2nd Paper Exit
VCC(+5V)
CN101-5 (W) -4
CN101-6 (W) -3
CN101-7 (W) -2
CN101-8 (W) -1
K A E C
SN:2nd Paper Exit
LED:Drum Master Detection
VCC(+5V)
SN:Drum Master Detection
VCC(+5V)
CN101-9 (W) -4
CN101-10 (W) -3
CN101-11 (W) -2
CN101-12 (W) -1
K A E C
SN:Drum Master Detection
GND-A
SN:Paper Table Low Limit[▼5]
VCC(+5V)
CN101-13 (W)
CN101-14 (W)
CN101-15 (W)
GND OUT +5V
SN:Paper Table Low Limit
LED:Master Eject
VCC(+5V)
SN:Master Eject
VCC(+5V)
CN101-16 (W) -6
CN101-17 (W) -5
CN101-18 (W) -4
CN101-19 (W) -3
K A E C
SN:Master Eject
MSW:Master Eject Box[▲5]
GND-A
CN101-20 (W) -2
CN101-21 (W) -1
Master Eject Box SW
GND-A
SN:Pressure Plate:Up
VCC(+5V)
CN101-22 (W) -9
CN101-23 (W) -8
CN101-24 (W) -7
GND OUT +5V
SN:Upper Pressure Plate
GND-A
SN:Pressure Plate:Low[▼5]
VCC(+5V)
CN101-25 (W) -6
CN101-26 (W) -5
CN101-27 (W) -4
GND OUT +5V
SN:Low Pressure Plate
GND-A
SN:Full Master[▲5]
VCC(+5V)
CN101-28 (W) -3
CN101-29 (W) -2
CN101-30 (W) -1
GND OUT +5V
SN:Full Master Box
GND-A
SN:Paper Size 3
VCC(+5V)
CN102-1 (W) -12
CN102-2 (W) -11
CN102-3 (W) -10
GND OUT +5V
SN:Paper Width 3
GND-A
SN:Paper Size 2
VCC(+5V)
CN102-4 (W) -9
CN102-5 (W) -8
CN102-6 (W) -7
GND OUT +5V
SN:Paper Width 2
GND-A
SN:Paper Size 1
VCC(+5V)
CN102-7 (W) -6
CN102-8 (W) -5
CN102-9 (W) -4
GND OUT +5V
SN:Paper Width 1
GND-A
SN:Paper Size 0
VCC(+5V)
CN102-10 (W) -3
CN102-11 (W) -2
CN102-12 (W) -1
CN102-13
GND OUT +5V
SN:Paper Width 0
Table Down
GND-A
CN102-14 (W) -2
CN102-15 (W) -1
Paper Table Down Button
Table Set
GND-A
CN102-16 (W) -9
CN102-17 (W) -8
Paper Table Safety SW
VCC(+5V)
SN:Paper End
VCC(+5V)
LED:Paper End
CN102-18 (W) -7
CN102-19 (W) -6
CN102-20 (W) -5
CN102-21 (W) -4
C E A K
SN:Paper End
SN:Paper Size 4
LED:Paper Size 4
VCC(+5V)
CN102-22 (W) -3
CN102-23 (W) -2
CN102-24 (W) -1
OUT LED +5V
SN:Paper Length
Main Control PCB

Section L

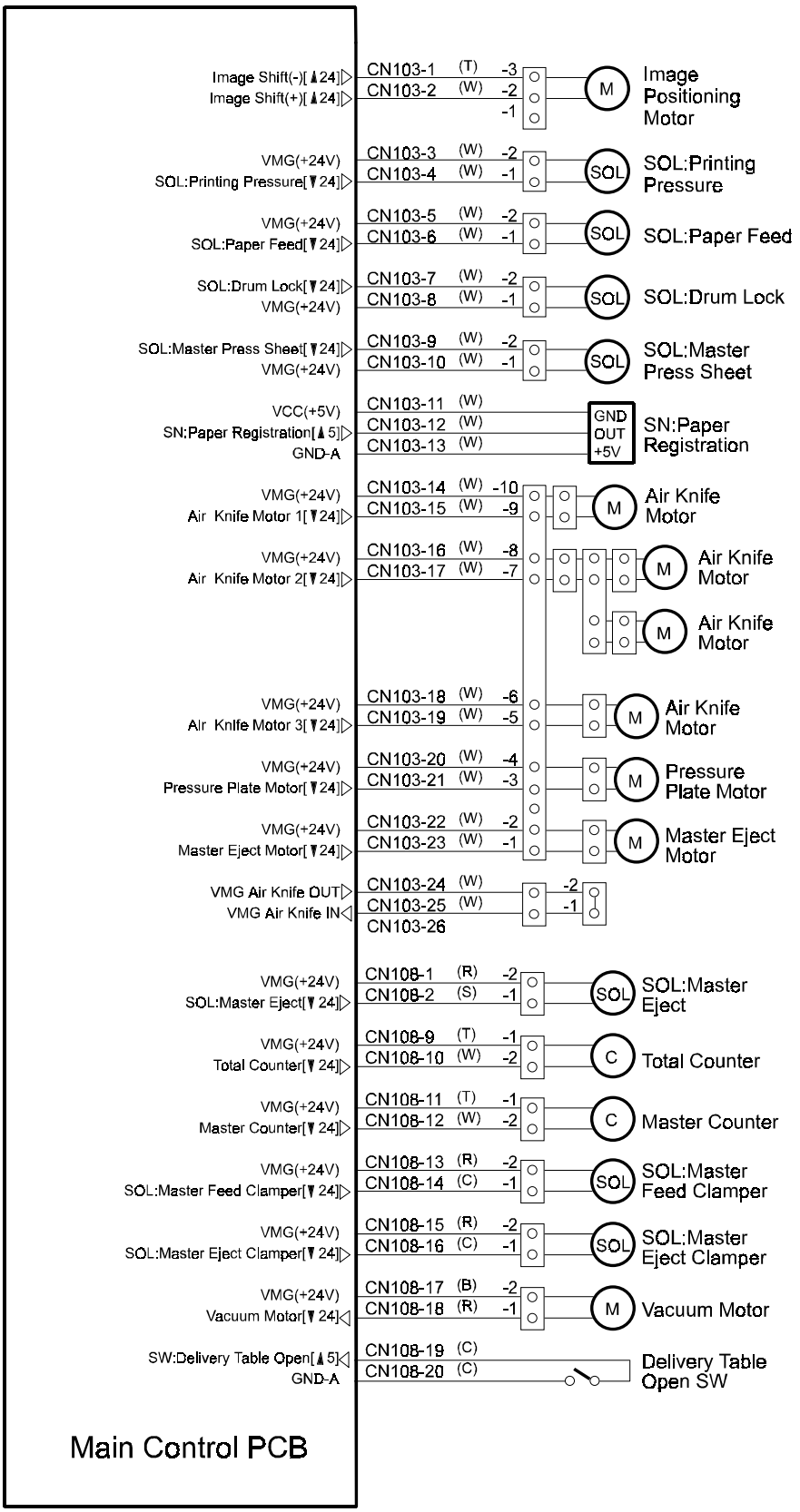


Image Shift(-)[▲24]
Image Shift(+)[▲24]
CN103-1 (T) -3
CN103-2 (W) -2
-1
M
Image Positioning Motor
VMG(+24V)
SOL:Printing Pressure[▼24]
CN103-3 (W) -2
CN103-4 (W) -1
SOL
SOL:Printing Pressure
VMG(+24V)
SOL:Paper Feed[▼24]
CN103-5 (W) -2
CN103-6 (W) -1
SOL
SOL:Paper Feed
SOL:Drum Lock[▼24]
VMG(+24V)
CN103-7 (W) -2
CN103-8 (W) -1
SOL
SOL:Drum Lock
SOL:Master Press Sheet[▼24]
VMG(+24V)
CN103-9 (W) -2
CN103-10 (W) -1
SOL
SOL:Master Press Sheet
VCC(+5V)
SN:Paper Registration[▲5]
GND-A
CN103-11 (W)
CN103-12 (W)
CN103-13 (W)
GND
OUT
+5V
SN:Paper Registration
VMG(+24V)
Air Knife Motor 1[▼24]
CN103-14 (W) -10
CN103-15 (W) -9
M
Air Knife Motor
VMG(+24V)
Air Knife Motor 2[▼24]
CN103-16 (W) -8
CN103-17 (W) -7
M
Air Knife Motor
M
Air Knife Motor
VMG(+24V)
Air Knife Motor 3[▼24]
CN103-18 (W) -6
CN103-19 (W) -5
M
Air Knife Motor
VMG(+24V)
Pressure Plate Motor[▼24]
CN103-20 (W) -4
CN103-21 (W) -3
M
Pressure Plate Motor
VMG(+24V)
Master Eject Motor[▼24]
CN103-22 (W) -2
CN103-23 (W) -1
M
Master Eject Motor
VMG Air Knife OUT
VMG Air Knife IN
CN103-24 (W)
CN103-25 (W)
CN103-26
-2
-1
VMG(+24V)
SOL:Master Eject[▼24]
CN108-1 (R) -2
CN108-2 (S) -1
SOL
SOL:Master Eject
VMG(+24V)
Total Counter[▼24]
CN108-9 (T) -1
CN108-10 (W) -2
C
Total Counter
VMG(+24V)
Master Counter[▼24]
CN108-11 (T) -1
CN108-12 (W) -2
C
Master Counter
VMG(+24V)
SOL:Master Feed Clamper[▼24]
CN108-13 (R) -2
CN108-14 (C) -1
SOL
SOL:Master Feed Clamper
VMG(+24V)
SOL:Master Eject Clamper[▼24]
CN108-15 (R) -2
CN108-16 (C) -1
SOL
SOL:Master Eject Clamper
VMG(+24V)
Vacuum Motor[▼24]
CN108-17 (B) -2
CN108-18 (R) -1
M
Vacuum Motor
SW:Delivery Table Open[▲5]
GND-A
CN108-19 (C)
CN108-20 (C)
Delivery Table Open SW
Main Control PCB

NA6

PARTS CATALOG

First Edition Janualy 1998

RICOH COMPANY, LTD.

PARTS CATALOG

INTRODUCTION

This chapter instructs you the numbers and names of parts on this machine.

INDEX to PARTS CATALOG

NA6	**(C228)**
DF UNIT	**(C550)**
DF UNIT TYPE 50	**(C562)**
SORTER TS20A/20B	**(C560/C561)**
RT4000	**(C563)**
TAPE MARKER TYPE20	**(C532)**

NA6 (C228)

PARTS CATALOG

INTRODUCTION

This chapter instructs you the numbers and names of parts on this machine.

INDEX to PARTS CATALOG

LOCATION OF UNIT 3
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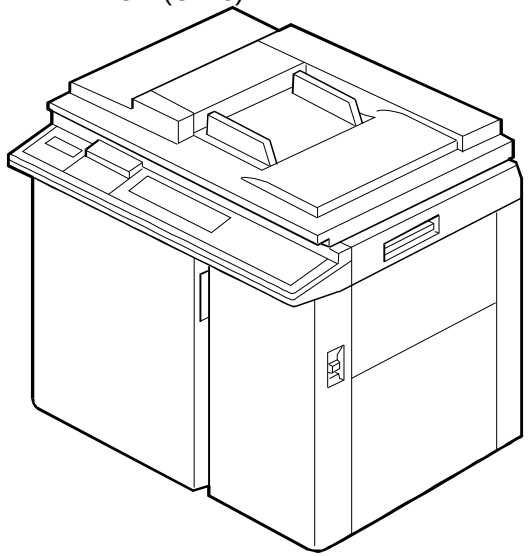
1.EXTERIOR (C228)



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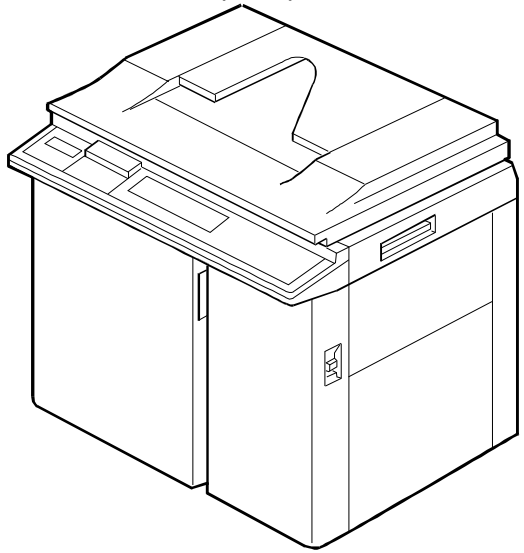
2.PLATEN COVER (C228)



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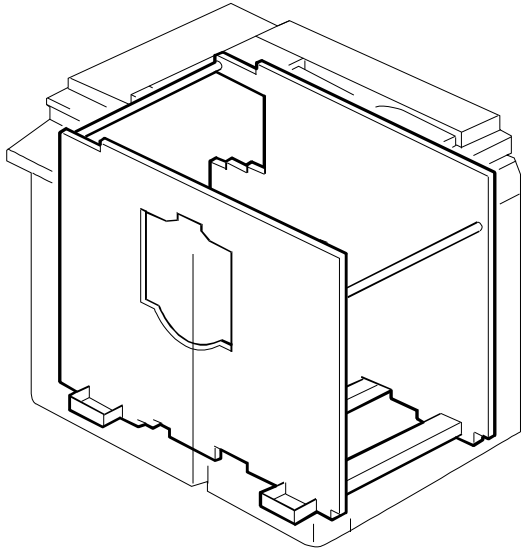
3.FRAME SECTION 1 (C228)



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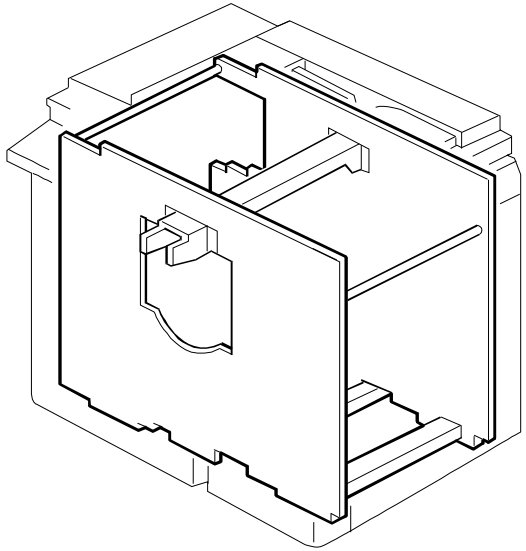
4.FRAME SECTION 2 (C228)



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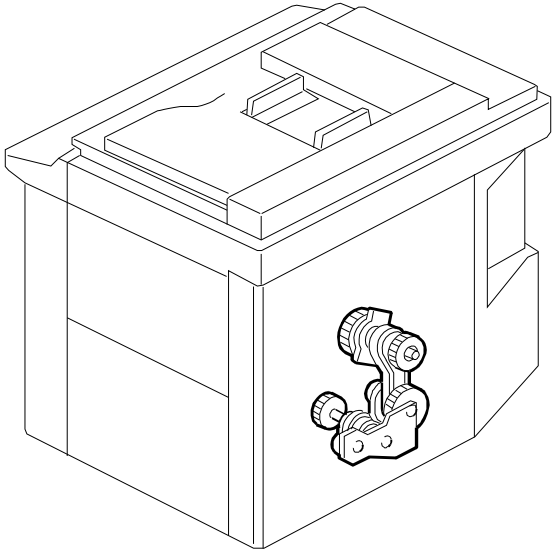
5.DRIVE SECTION 1 (C228)



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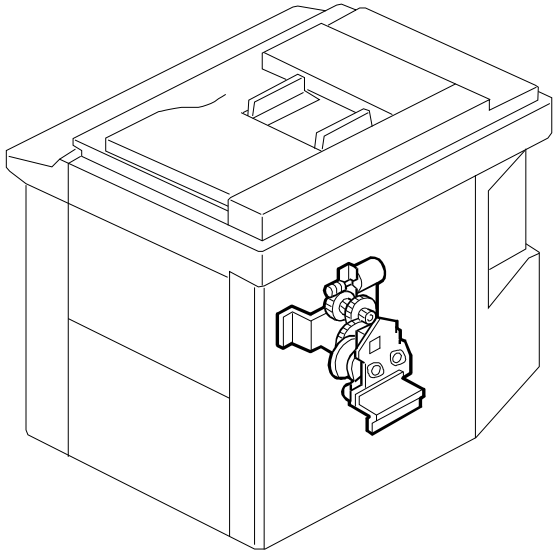
6.DRIVE SECTION 2 (C228)



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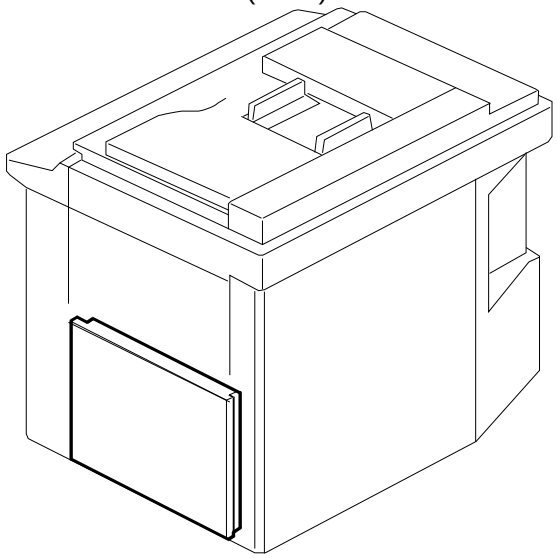
LOCATION OF UNIT

7.PAPER TABLE 1 (C228)



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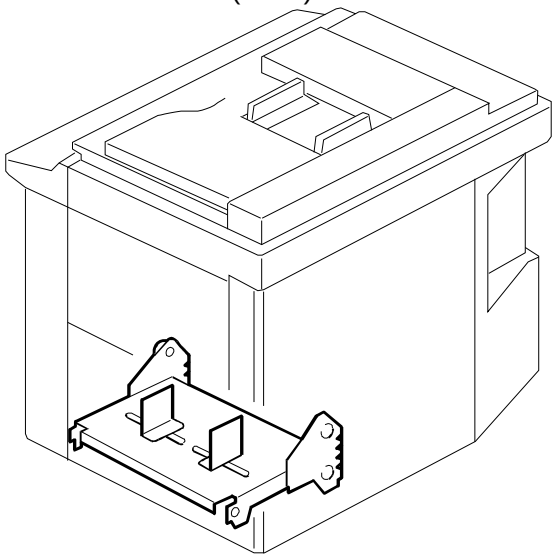
8.PAPER TABLE 2 (C228)



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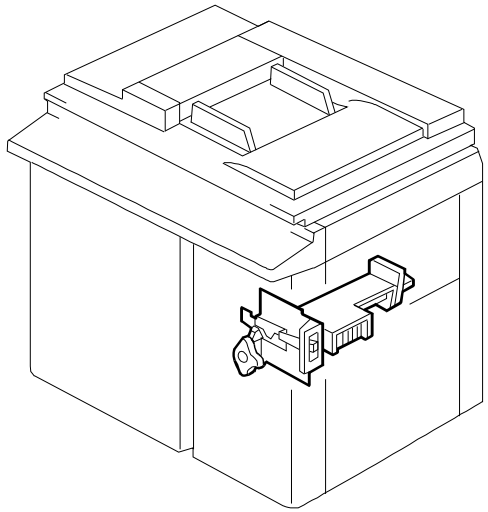
9.PAPER FEED & UPPER SEPARATION ROLLERS (C228)



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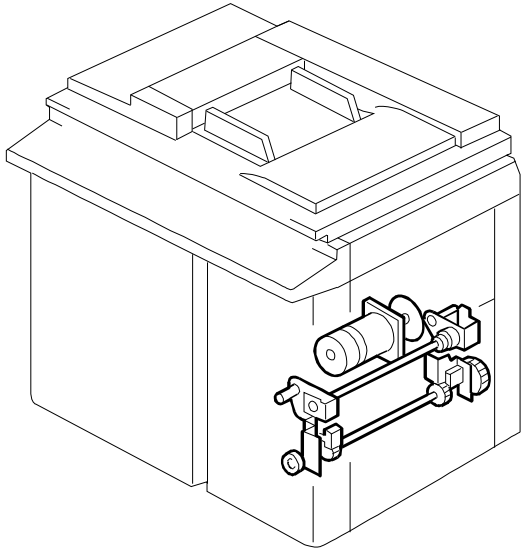
10.PAPER SEPARATION 1 (C228)



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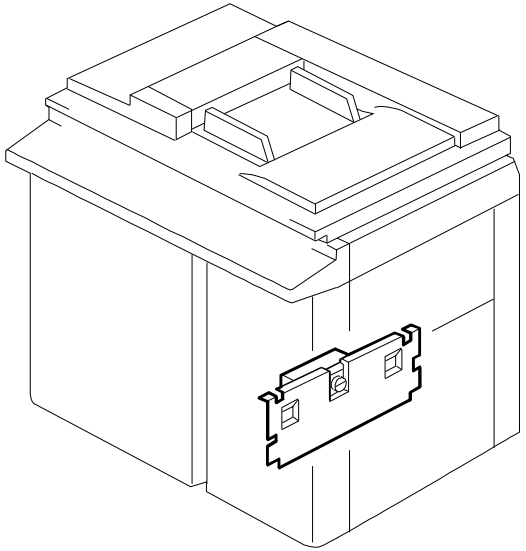
11.PAPER SEPARATION 2 (C228)



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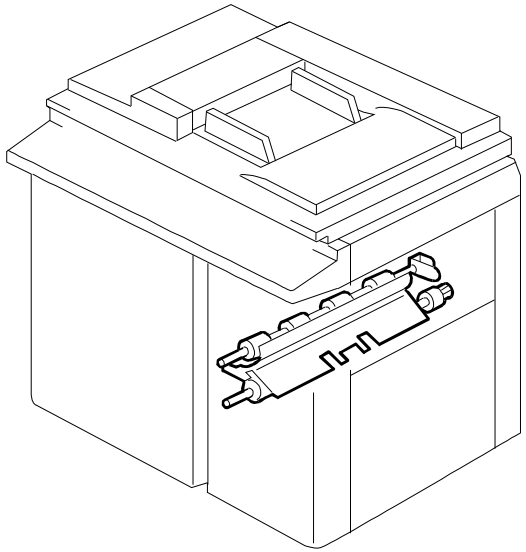
12.2ND FEED ROLLERS (C228)



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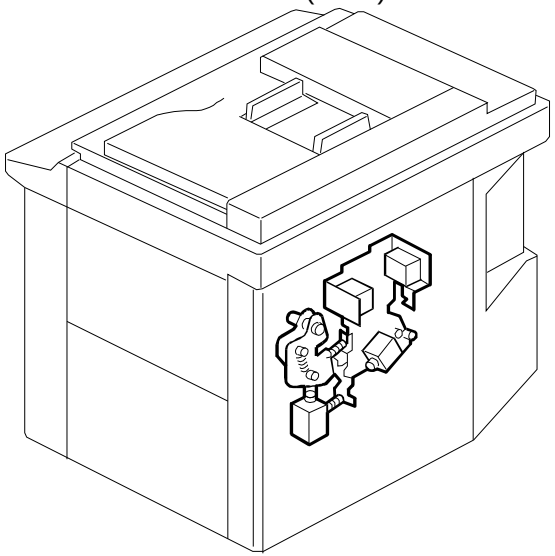
LOCATION OF UNIT

13.PAPER FEED DRIVE (C228)



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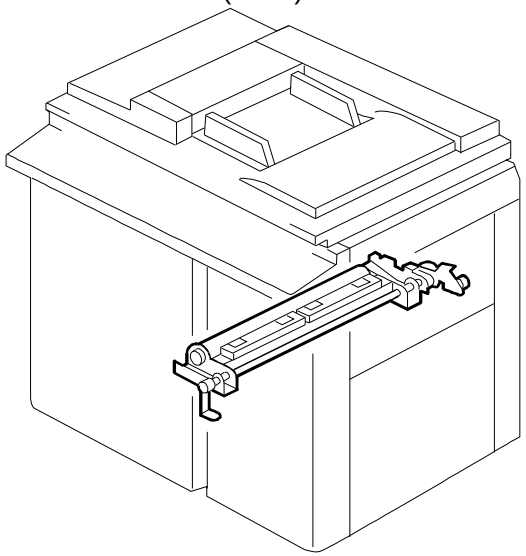
14.PRESS ROLLER (C228)



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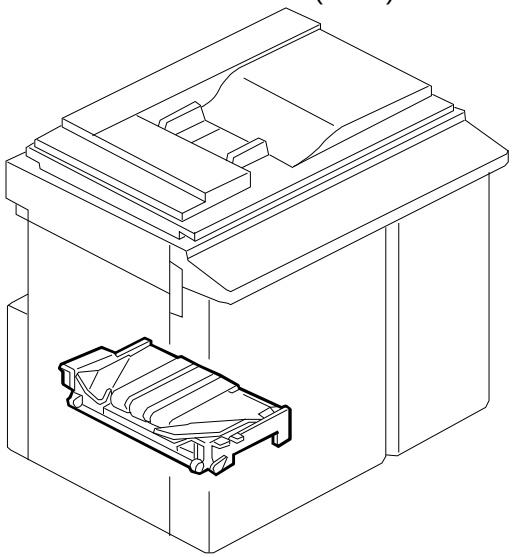
15.PAPER EXIT SECTION 1 (C228)



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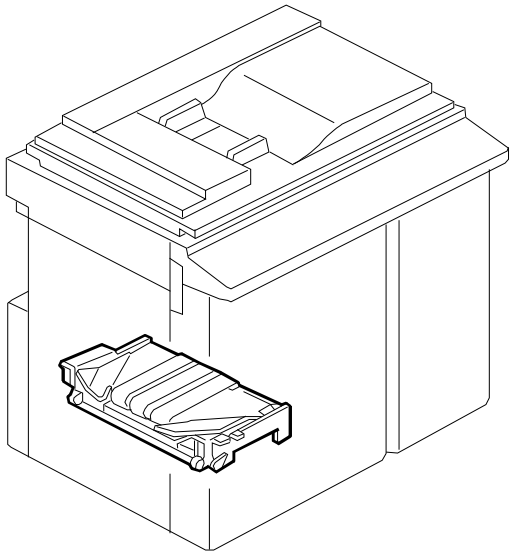
16.PAPER EXIT SECTION 2 (C228)



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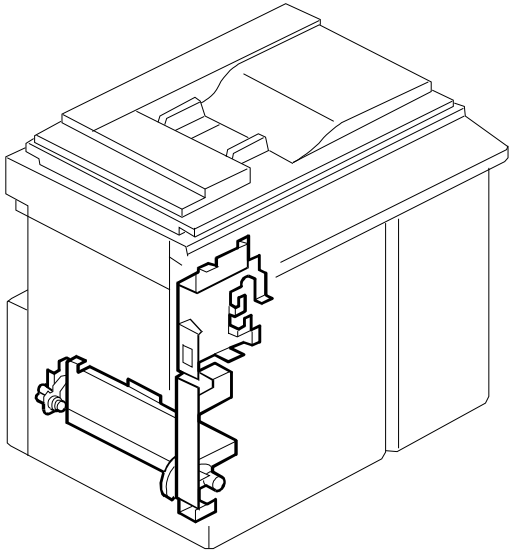
17.PAPER EXIT SECTION 3 (C228)



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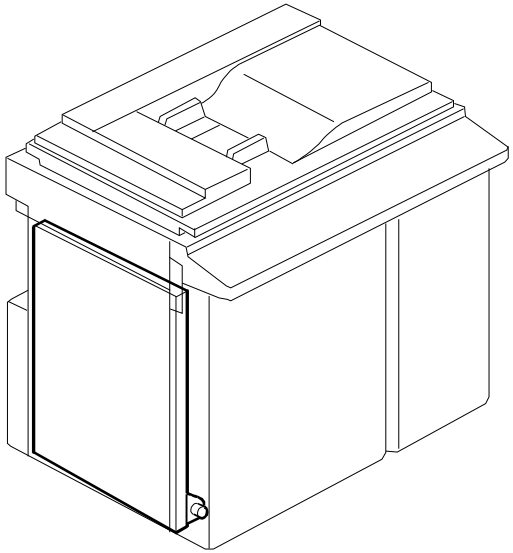
18.PAPER EXIT SECTION 4 (C228)



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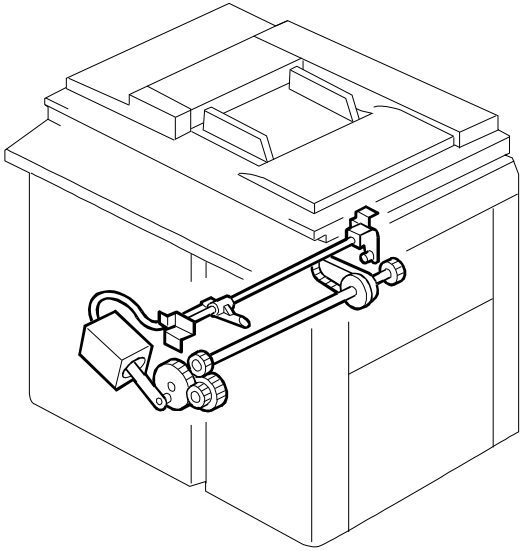
LOCATION OF UNIT

19.PAPER EXIT SECTION 5 (C228)



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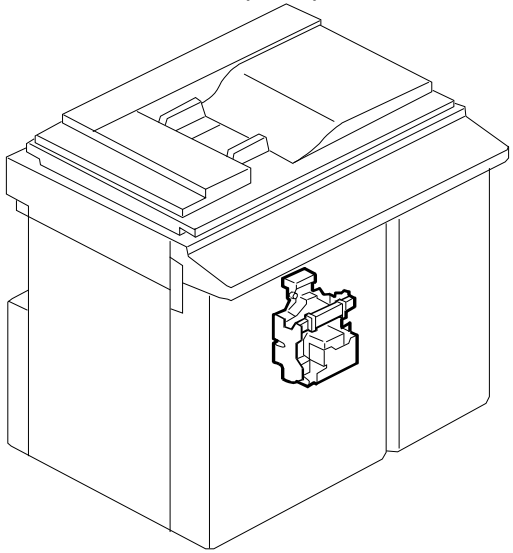
20.DRUM SECTION 1 (C228)



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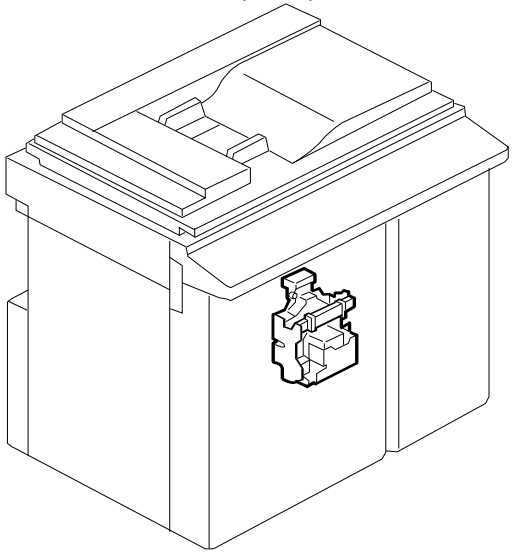
21.DRUM SECTION 2 (C228)



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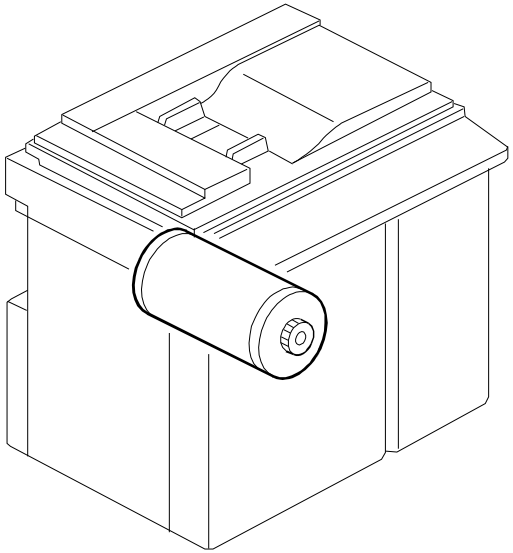
22.DRUM SECTION 3 (C228)



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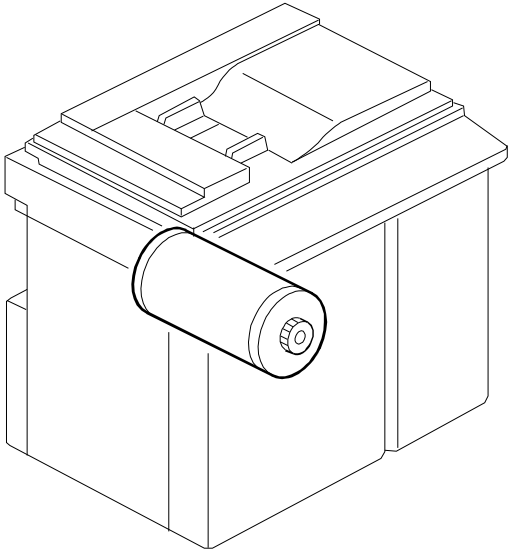
23.DRUM SECTION 4 (C228)



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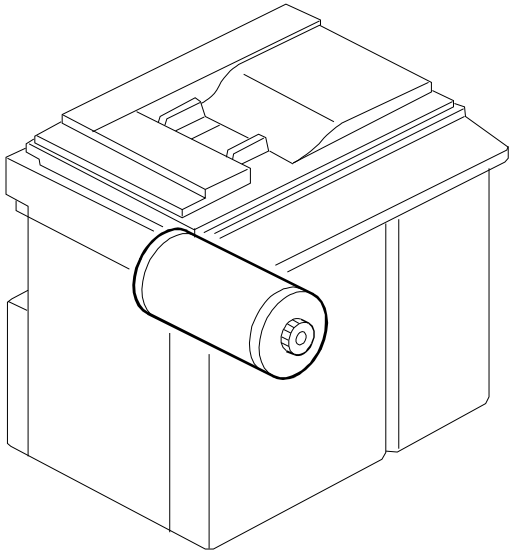
24.DRUM SECTION 5 (C228)



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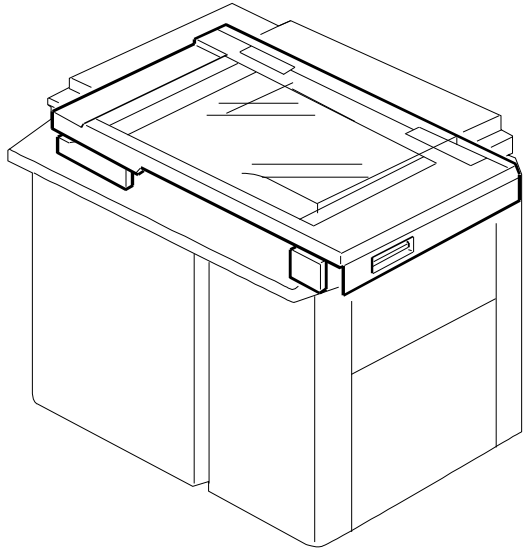
LOCATION OF UNIT

25.SCANNER SECTION 1 (C228)



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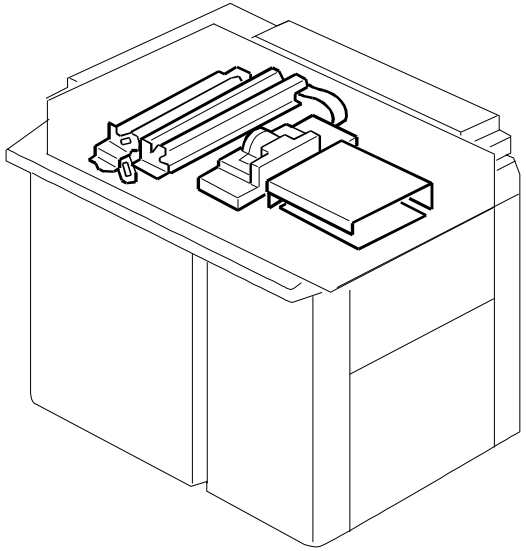
26.SCANNER SECTION 2 (C228)



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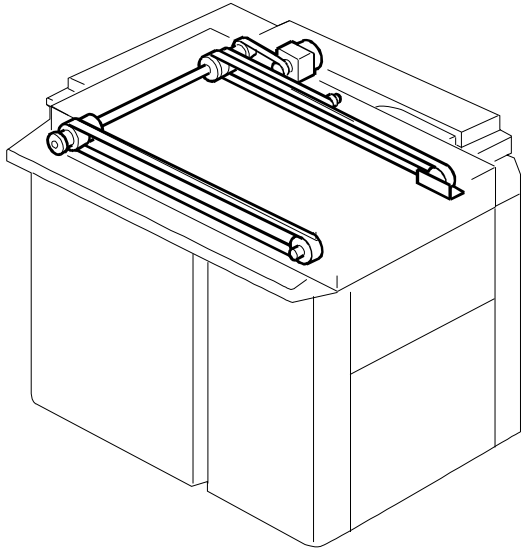
27.SCANNER SECTION 3 (C228)



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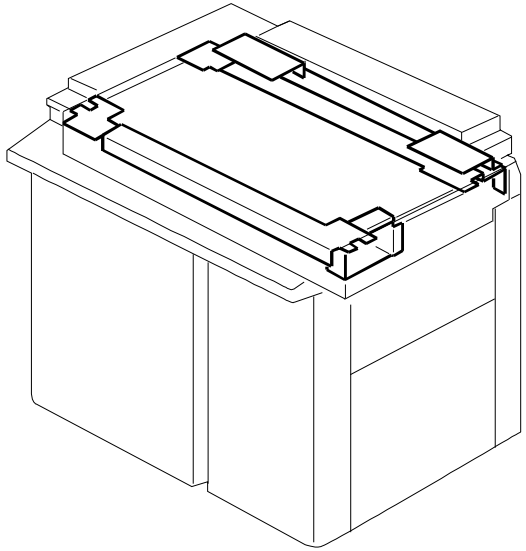
28.SCANNER SECTION 4 (C228)



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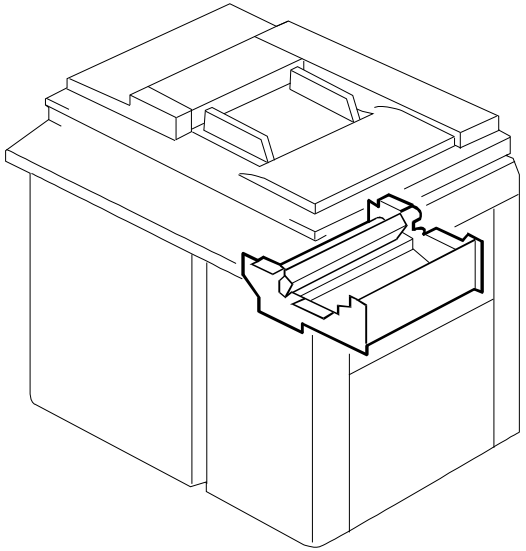
29.PLOTTER SECTION 1 (C228)



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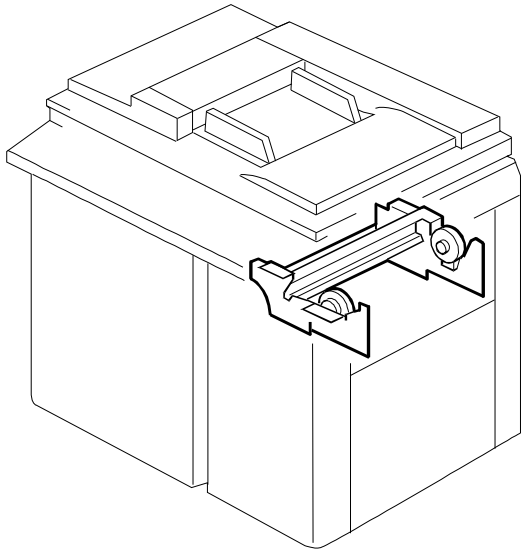
30.PLOTTER SECTION 2 (C228)



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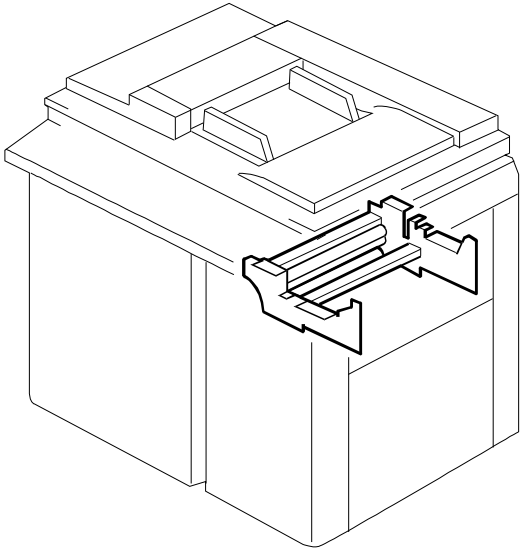
LOCATION OF UNIT

31.PLOTTER SECTION 3 (C228)



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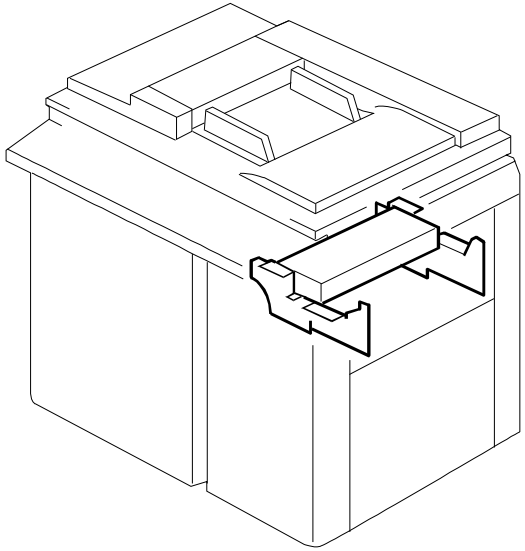
32.PLOTTER SECTION 4 (C228)



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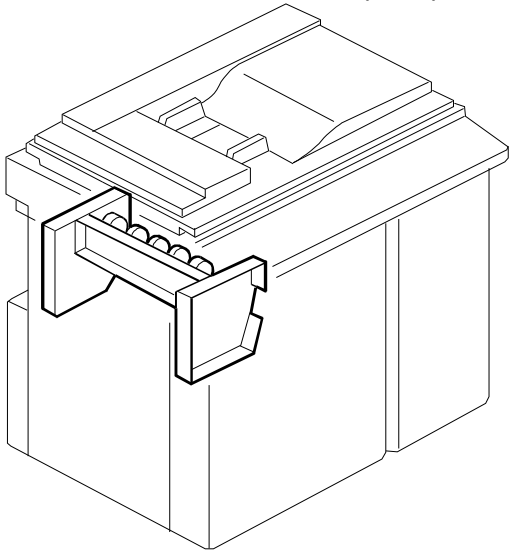
33.MASTER EJECT SECTION 1 (C228)



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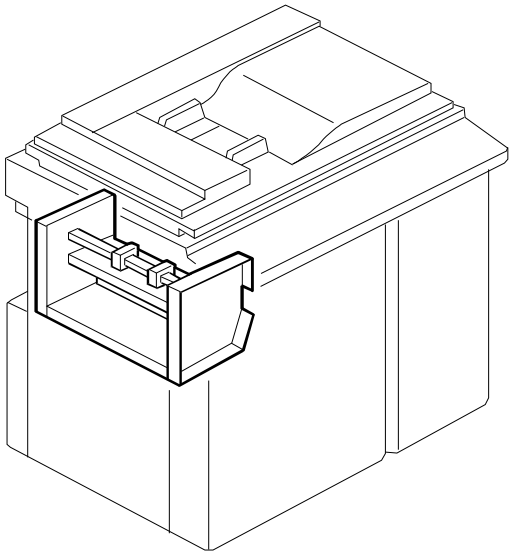
34.MASTER EJECT SECTION 2 (C228)



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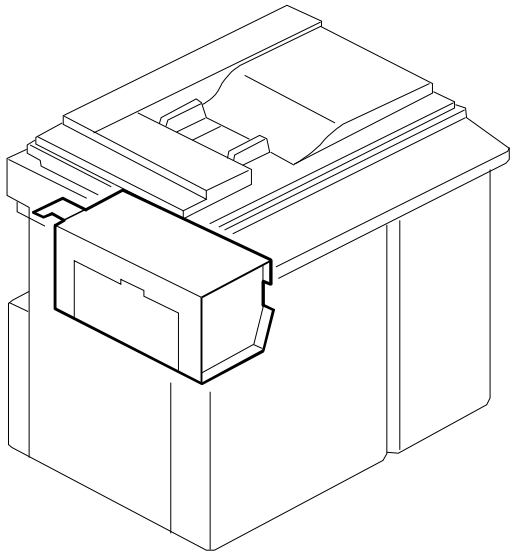
35.MASTER EJECT SECTION 3 (C228)



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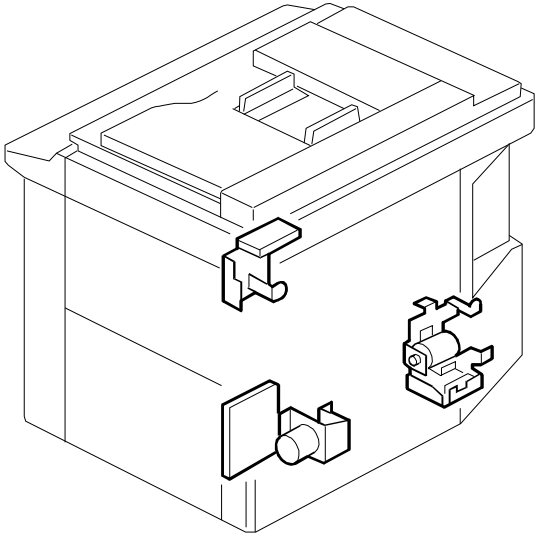
36.ELECTRICAL SECTION 1 (C228)



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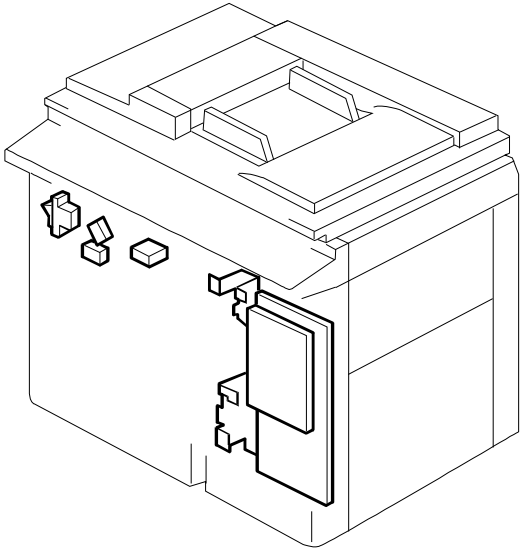
LOCATION OF UNIT

37.ELECTRICAL SECTION 2 (C228)



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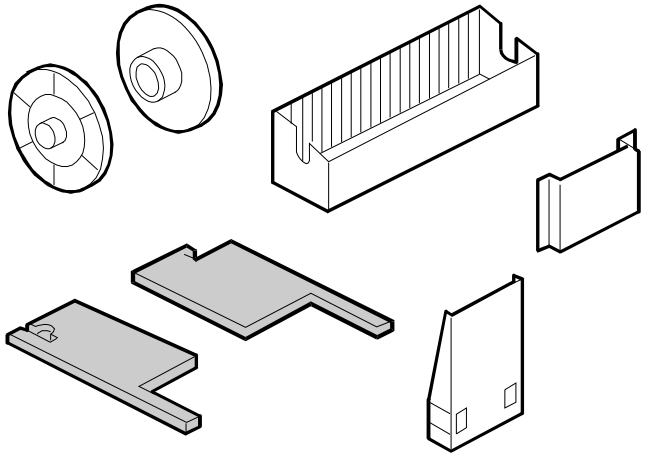
38.ACCSESSORIES (C228)



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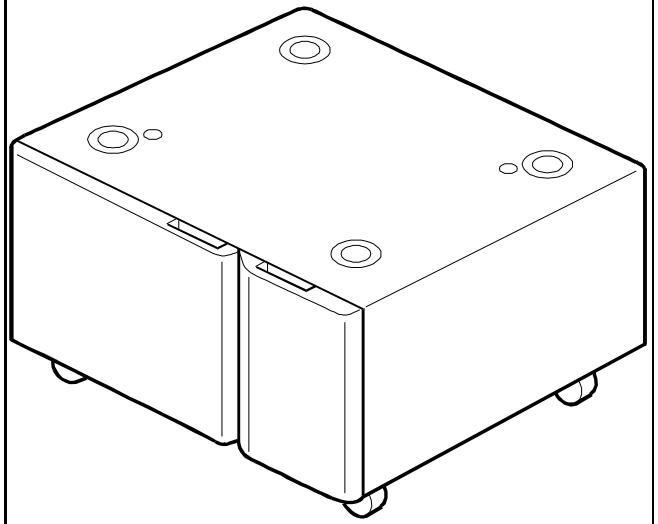
39.TABLE SECTION (C228)



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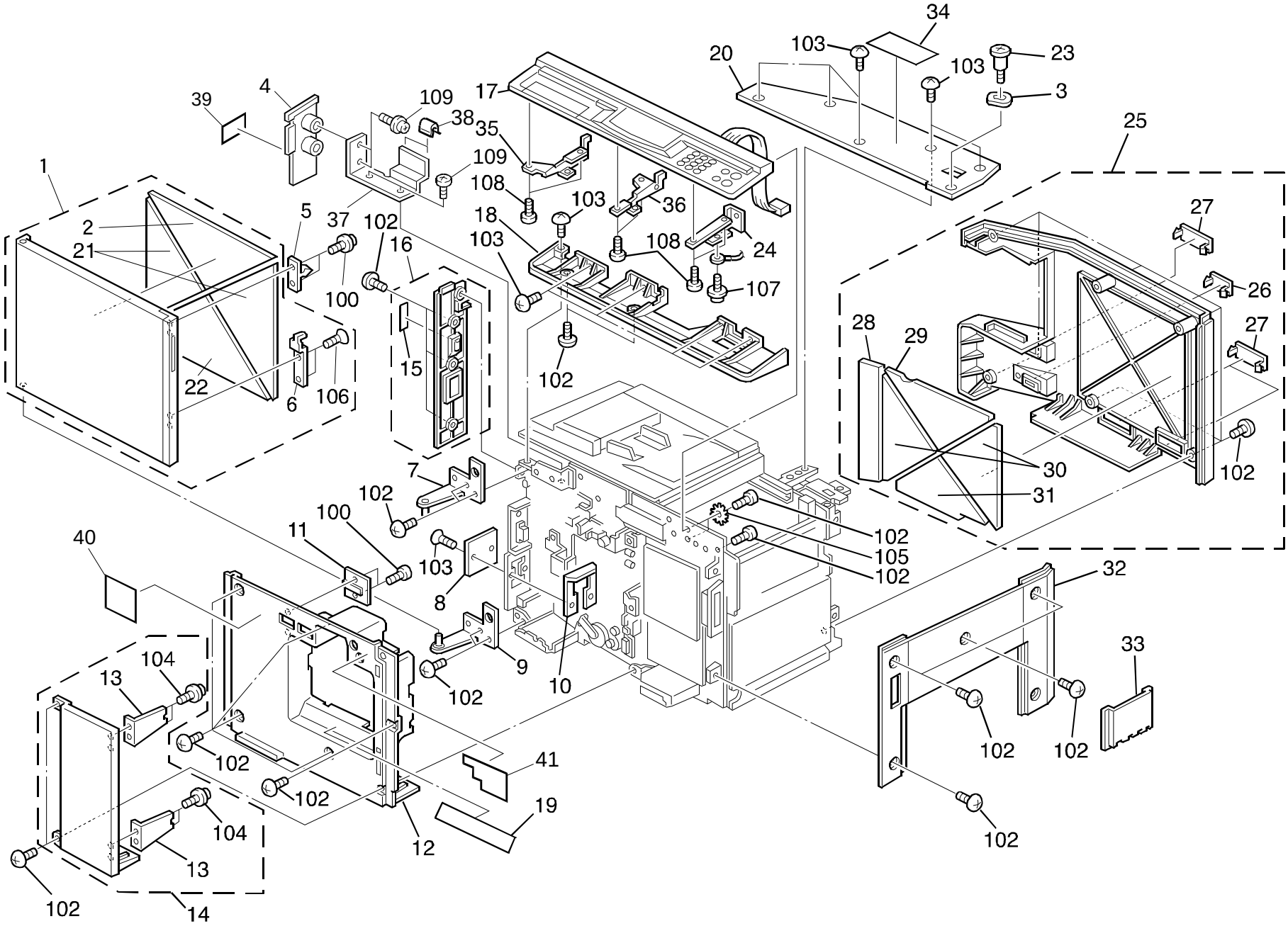
1.EXTERIOR (C228)

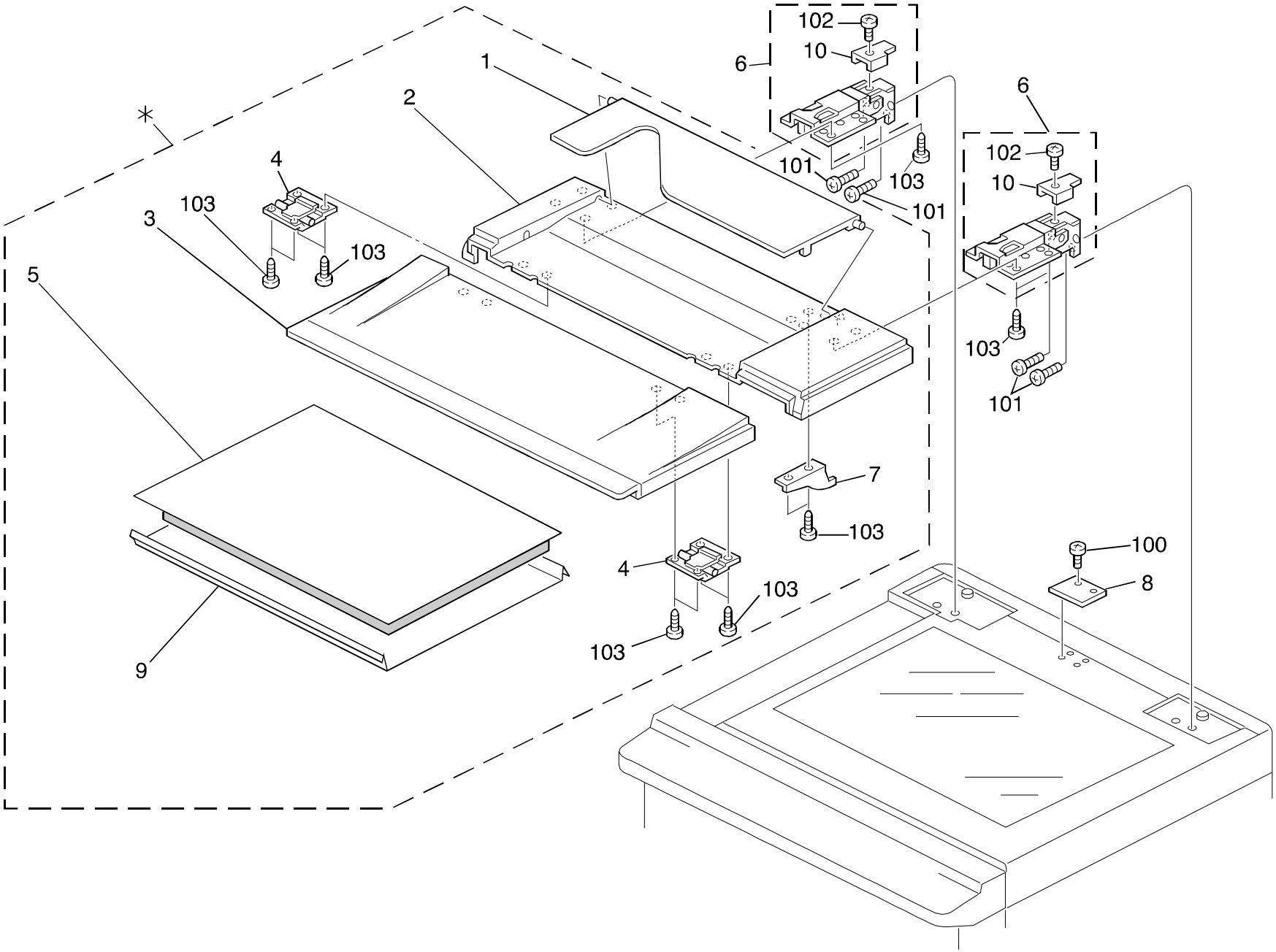


1.EXTERIOR (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C218 2424	Front Door Ass'y (RIC)	1
1	C223 2861	Front Door Ass'y - NRG	1
2	C209 2558	Upper Pad - Front Door	1
3	C217 5102	Spring Washer	1
4	C218 2750	Front Left Cover	1
5	C209 2469	Door Catch	1
6	C209 2428	Magnet Catch Plate	1
7	C209 2432	Upper Hinge Bracket	1
8	C217 2455	Key Counter Cover	1
9	C209 2435	Lower Hinge Bracket	1
10	A030 1339	Plate Nut - Key Counter	1
11	C209 2470	Left Cover Cap	1
12	C218 2832	Left Front Cover (RIC-EU)	1
12	C218 2803	Left Front Cover - LT (RIC)	1
12	C222 2864	Left Front Cover (NRG-LT)	1
12	C222 2874	Left Front Cover (NRG-EU)	1
13	C209 2411	Right Cover Support Bracket	2
14	C228 2409	Front Right Cover (RIC)	1
14	C222 2860	Front Right Cover (NRG)	1
15	C217 2514	Decal - Main Switch	1
16	C218 2809	Main Switch Cover	1
17	C228 2831	Operation Panel Ass'y (A4)	1
17	C228 2801	Operation Panel Ass'y (LT)	1
18	C218 2405	Lower Cover- Operation Panel	1
19	C218 2817	Decal - Replacement	1
20	C228 2811	Rear Upper Cover	1
21	C209 2560	Side Pad - Front Door	2
22	C209 2559	Lower Pad - Front Door	1
23	C218 2525	Stepped Screw - M4	1
24	C222 2122	Right Bracket - Operation Panel	1
25	C223 2812	Rear Cover Ass'y	1
26	C217 2453	Rear Cover Cap- Small	1
27	C217 2454	Rear Cover Cap- Large	2
28	C221 2575	Large Pad - Rear Cover	1
29	C209 2572	Upper Pad - Rear Cover	1

Index No.	Part No.	Description	Q'ty Per Assembly
30	C209 2574	Side Pad - Rear Cover	2
31	C221 2573	Lower Pad - Rear Cover	1
32	C218 2450	Right Cover	1
33	C219 2705	Original Holder	1
34	C228 2552	Caution Decal - Master Set	1
35	C222 2120	Left Bracket - Operation Panel	1
36	C222 2121	Middle Bracket - Operation Panel	1
37	C218 2026	Grounding Bracket	1
38	C218 2034	Clamp	2
39	C218 2825	Decal - Master Eject Open	1
40	C218 2816	Decal - Drum Replacement - LT	1
41	C210 2813	Decal - Replacing The Drum Unit	1
100	0965 3006Z	Tapping Screw With Flat Washer - M3x6	
102	0344 0080D	Philips Truss Head Screw - M4x8	
103	0333 0080D	Philips Counter Sunk Screw - M3x8	
104	0965 4008W	Tapping Screw With Flat Washer - M4x8	
105	0705 0040B	Toothed Washer	
106	0802 5149	Tapping Screw - M4x9	
107	0951 4006Z	Philips Screw With Flat Washer - M4	
108	0802 5097	Tapping Screw - M3x10	

2.PLATEN COVER (C228)

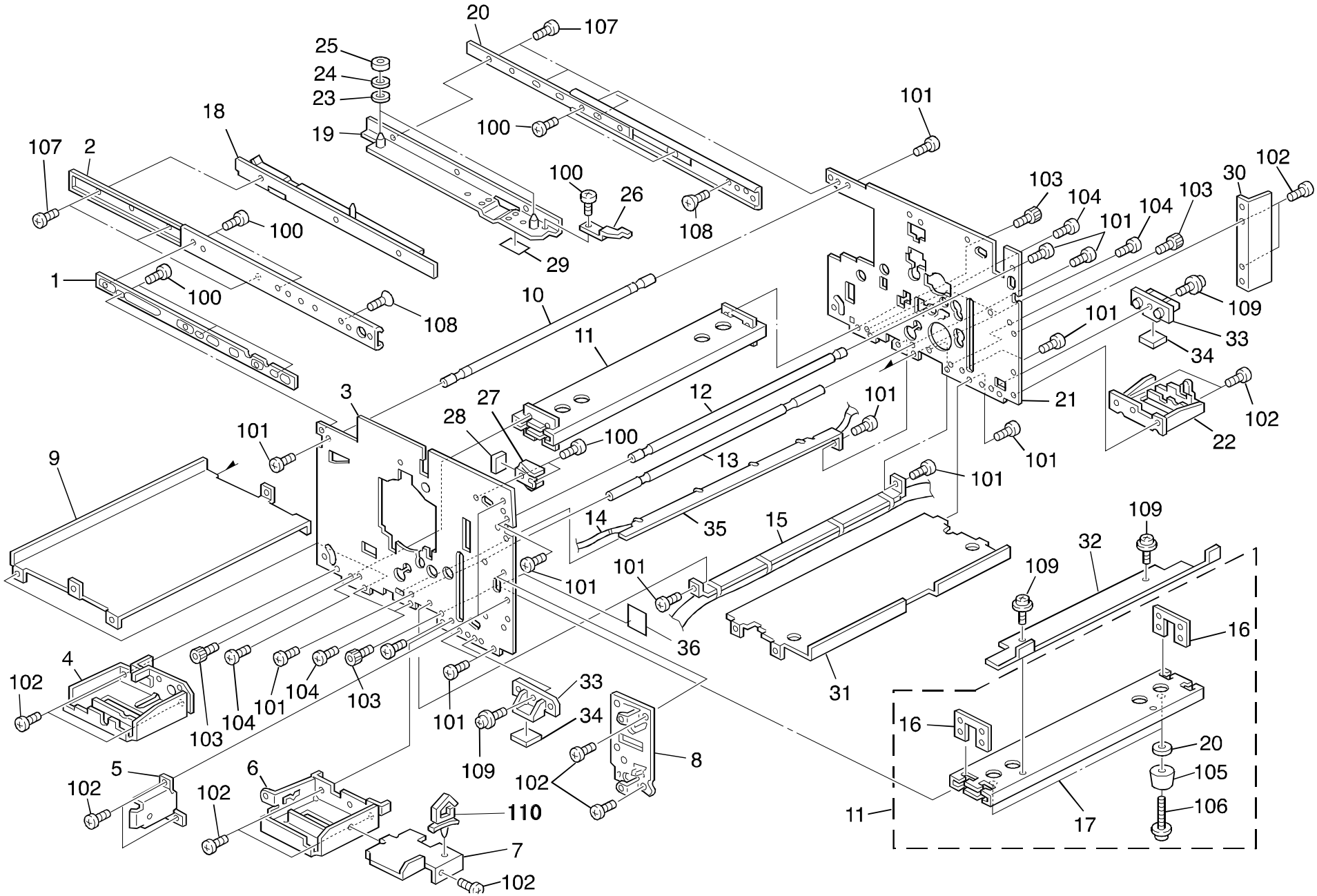


2.PLATEN COVER (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
*	C218 2807	Platen Cover Ass'y	1
1	C219 2705	Original Holder	1
2	C219 2704	Rear Platen Cover	1
3	C219 2702	Front Platen Cover	1
4	5448 2824	Flex Hinge - Platen Cover	2
5	AA16 2053	Platen Cover Pad	1
6	C219 2710	Platen Cover Hinge	2
7	C219 2706	Platen Cover Sensor Actuator	1
8	C219 3473	Interface Cover	1
9	C219 2708	Platen Cover Sheet	1
10	C219 2711	Hinge Stopper	2

Index No.	Part No.	Description	Q'ty Per Assembly
100	0801 1004	Screw - M4X4	
101	0314 0060W	Philips Pan Head Screw - M4x6	
102	0313 0050W	Philips Pan Head Screw - M3x5	
103	0452 4012Z	Tapping Bind Screw - M4x12	

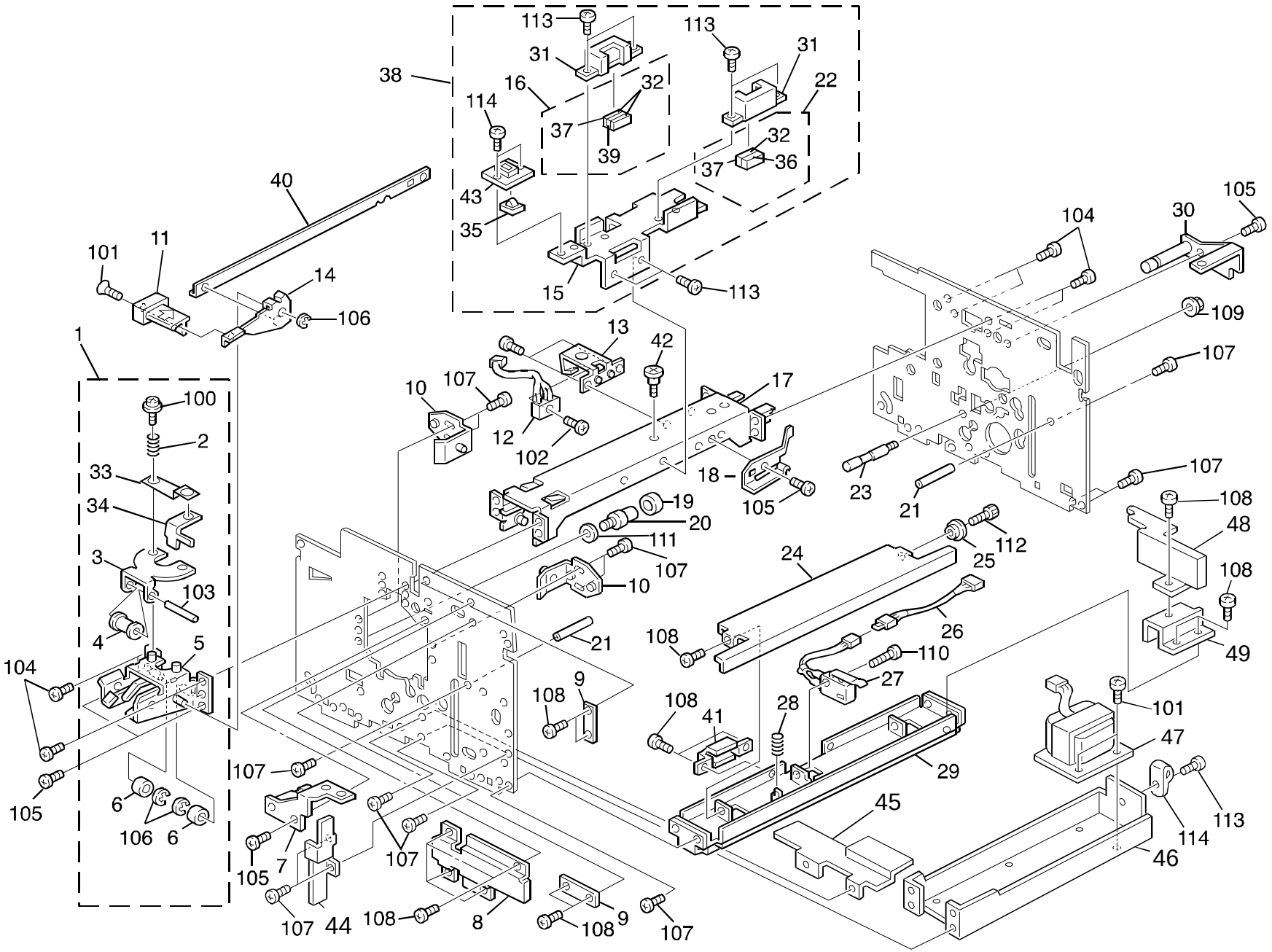
3.FRAME SECTION 1 (C228)



3.FRAME SECTION 1 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C218 3124	Spacer	1
2	C218 3123	Slide Rail	2
3	C222 2001	Left Side Plate	1
4	C219 2106	Left Grip - Paper Delivery	1
5	C209 2413	Right Cover Bracket	1
6	C209 2061	Left Grip - Paper Feed	1
7	C222 2062	Left Grip Cover	1
8	C218 2120	Board Bracket	1
9	C222 2098	Bottom Cover	1
10	C203 2091	Front Shaft	1
11	C222 2071	Bottom Stay	2
12	C209 2050	Front Stay	1
13	C219 2111	Shaft	1
14	C223 8123	AC Drive Harness - 120V	1
14	C223 8223	AC Drive Harness - 230V	1
15	C228 8208	DC Drive Harness (230V)	1
15	C228 8113	DC Drive Harness (115V)	1
16	C203 2096	Bottom Stay Nut	2
17	C222 2072	Bottom Stay	1
18	C218 3131	Slide Rail Left Bracket	1
19	C218 3127	Slide Rtail Right Bracket	1
20	C218 3123	Slide Rail	2
21	C222 2002	Right Side Plate	1
22	C219 2150	Rear Right Grip	1
23	C218 3135	Spacer Cushion	1
24	C218 3134	Scanner Base Cushion 2	2
25	C218 3133	Scanner Base Cushion 1	2
26	C218 3125	Scanner Open Actuater	2
27	C222 3136	Scanner Rail Stopper	1
28	C218 3138	Stopper Seal	1
29	C218 3130	Slide Rail Seal	1
30	C219 2152	Rear Cover Bracket	1
31	C223 2085	Paper Table Lower Cover	1
32	C222 2095	Bottom Cover - Delivery Table	1
33	C222 2089	Side Plate Bracket	2
34	C222 2092	Seal	2
35	C219 2112	Harness Satay	1
36	C207 2005	Seal - 30	1
100	0314 0060Z	Philips Pan Head Screw - M4x6	
101	0314 0080Z	Philips Screw - 4x8	
102	0434 0080Z	Pan Head Self-tapping Screw - M4x8	
103	0595 0120E	Socket Screw - M5X12	
104	0315 0120Z	Philips Screw - 5x12	
105	0805 6009	Rubber Foot	
106	0951 5035Z	Philips Screw W/T Flat Washer - M3x35	
107	0801 1004	Screw - M4X4	
108	0324 0060Z	Philips Sunken Head Screw - M4x6	
109	0951 3006Z	Philips Screw With Flat Washer - M3x6	
110	1105 0209	Clamp	

4.FRAME SECTION 2 (C228)

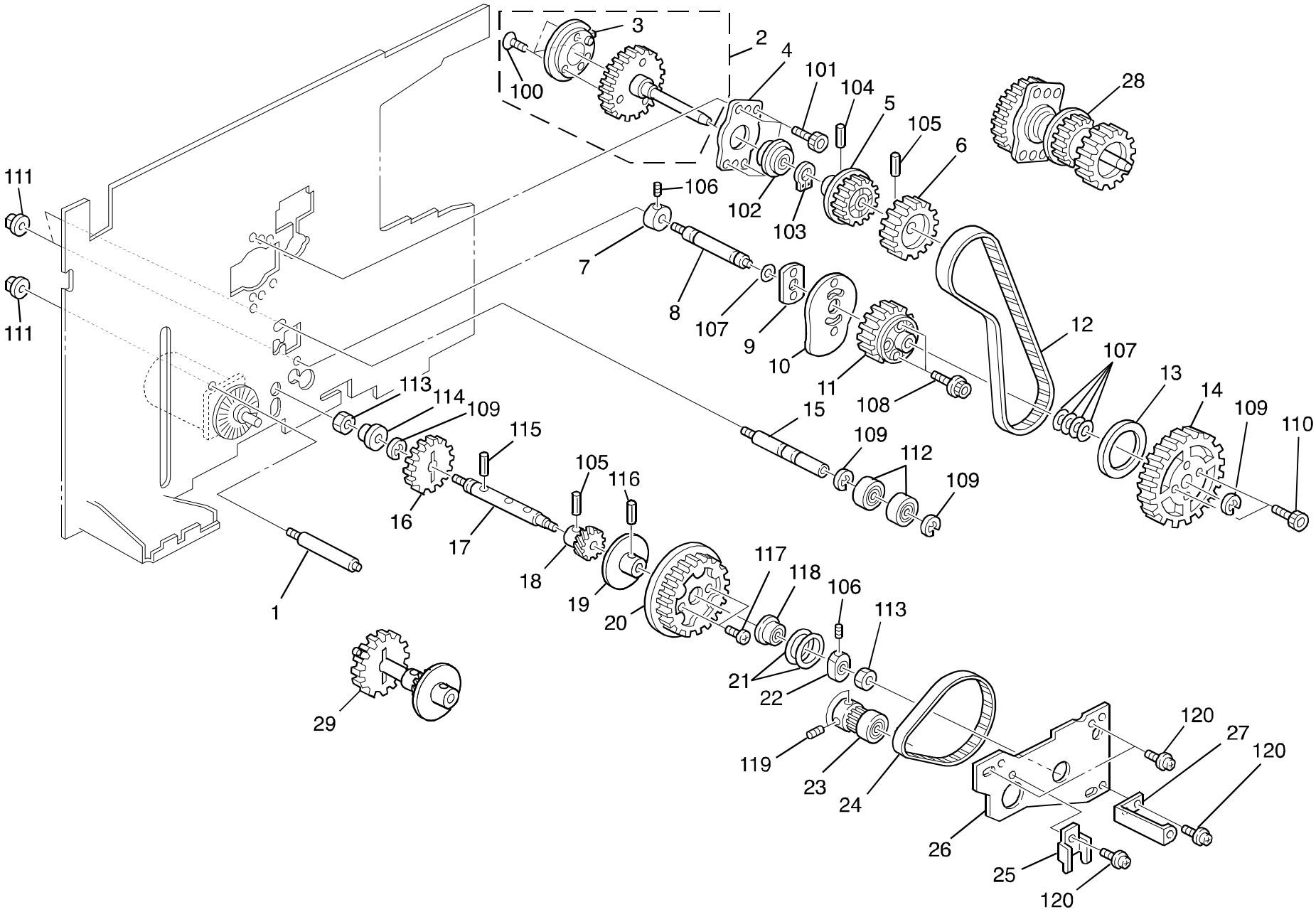


4.FRAME SECTION 2 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C219 4505	Drum Stopper Ass'y	1
2	C201 4533	Drum Stopper Spring	1
3	C201 4531	Drum Stopper Pawl	1
4	C201 4532	Drum Stopper Roller	1
5	C219 4506	Stopper Base	1
6	C201 4606	Stopper Releasing Plate	2
7	C223 2052	Left Fixing Bracket	1
8	C218 2024	Flat Cable Cover	1
9	C218 3039	Flat Cable Clamp	3
10	C224 4520	Drum Lock Pin	2
11	C215 4514	Drun Lock Knob	1
12	C209 8117	Drum Master Detection Sensor	1
13	C209 4519	Drum Sensor Bracket	1
14	C215 4511	Dram Lock Lever	1
15	C223 2036	Scanner Stopper Bracket	1
16	C223 2037	Cushion 1	1
17	C218 4502	Drum Rail Stay	1
18	C218 4528	Plate Spring - Drum Rail	1
19	5501 4719	Rubber Ring - Stopper	1
20	C200 3716	Cushion Shaft	1
21	C209 4190	Stud	2
22	C223 2038	Cushion 2	1
23	C209 2110	Drive Support Shaft	1
24	C219 2428	Switch Plate - Paper Feed Table	1
25	5403 2048	Bushing - 4mm	1
26	C223 8295	Safety Switch Relay Harness	1
27	C223 8294	Safety Switch	1
28	AA06 3016	Pressure Spring	1
29	C222 2429	Support Cover - Paper Feed Cover	1
30	C209 2056	Right Fixing Plate	1
31	C223 2039	Stopper Bracket	2
32	C223 2040	Stoper Seal 1	2
33	C215 4533	Spring Plate	1
34	C215 4532	Locking Arm	1
35	C203 4512	Grounding Spring Plate	1

Index No.	Part No.	Description	Q'ty Per Assembly
36	C223 2041	Stopper Seal 2	1
37	C223 2043	Stopper Seal	2
38	C223 2029	Stopper Seal	1
39	C223 2042	Stopper Seal 3	1
40	C215 4515	Drum Lock Link	1
41	C210 2091	Harness Cover	1
42	C217 4426	Shoulder Screw	1
43	C203 4511	Spring Plate Supporter	1
44	C210 2186	Right Cover Bracket	1
45	C218 2099	Transformer Cover	1
46	C216 2018	Transformer Bracket	1
47	C218 8181	Transformer - 115V	1
47	C216 8155	Transformer - 235V/105V	1
48	C219 2441	Upper Harness Cover	1
49	C219 2440	Lower Harness Cover	1
100	0951 3006Z	Philips Screw With Flat Washer - M3x6	
101	0323 0060Z	Philips Sunk Screw - M3x6	
102	0252 0080Z	Philips Pan Head Screw - M2x8	
103	0622 0250E	Spring Pin M2x250	
104	0434 0100Z	Pan Head Self-tapping Screw - M4x10	
105	0434 0080Z	Pan Head Self-tapping Screw - M4x8	
106	0720 0050Z	Retaining Ring - M5	
107	0314 0080Z	Philips Screw - 4x8	
108	0314 0060Z	Philips Pan Head Screw - M4x6	
109	0713 0050B	Hexagon Nut - M5	
110	0313 0120Z	Philips Screw - 3x12	
111	0807 3083	Washer	
112	0594 0080E	Bolt - M4x8	
113	0801 1004	Screw - M4X4	
114	0313 0050Z	Philips Screw - 3x5	

5.DRIVE SECTION 1 (C228)

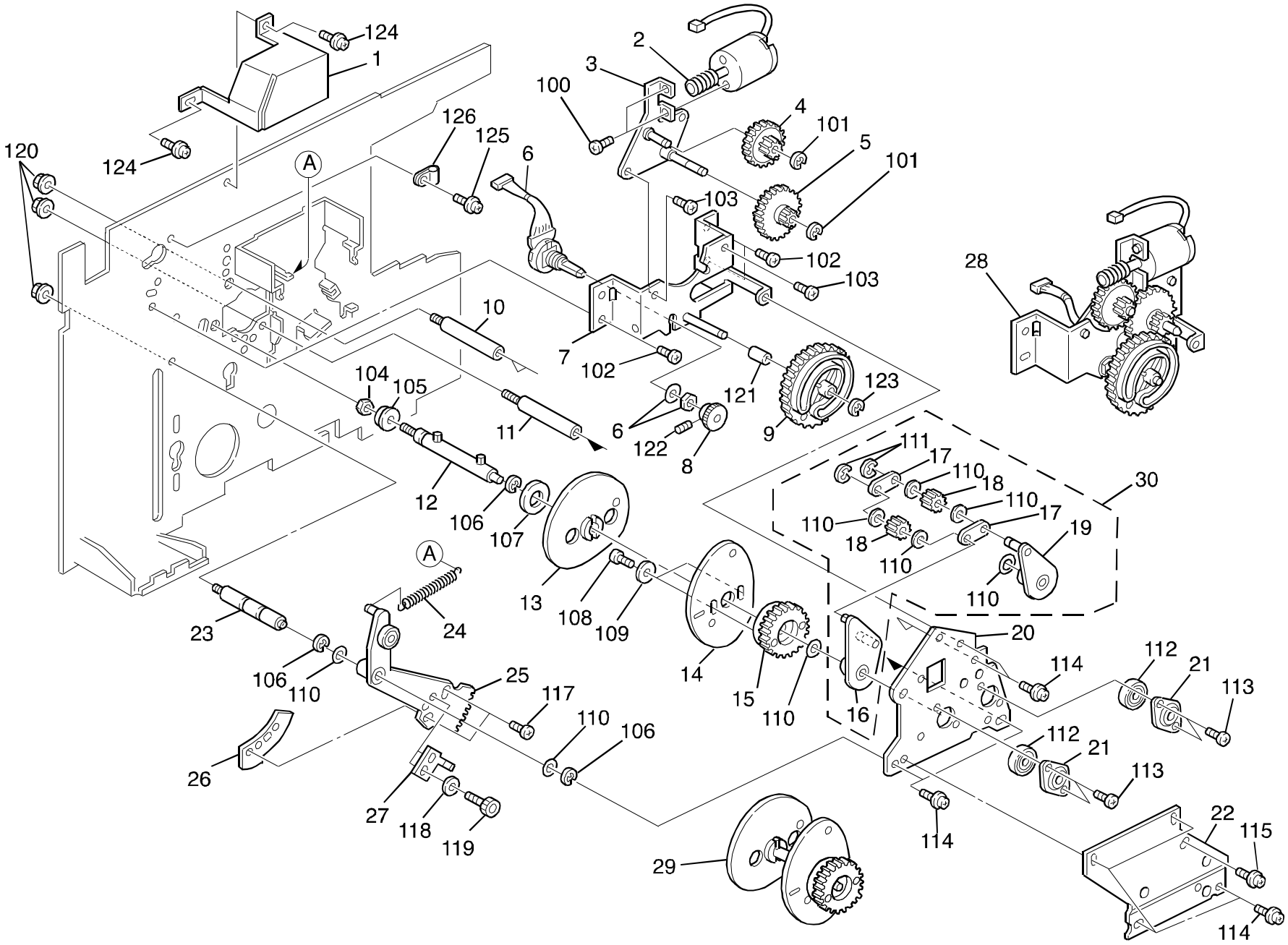


5.DRIVE SECTION 1 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C200 2232	Drive Shaft	1
2	C209 2218	Drum Drive Gear/pulley	1
3	C209 2220	Support Gear - 30z	1
4	C200 2248	Fixing Plate	1
5	C203 2317	Pulley - 26Z	1
6	C201 2217	Gear - 50T	1
7	C200 2221	Collar - Pressure Cam Shaft	1
8	C200 2225	Pressure Cam Shaft	1
9	C200 2224	Plate Nut - Print Pressure Cam	1
10	C228 5561	Pressure Roller Cam	1
11	C203 2312	Pulley	1
12	C203 2316	Timing Belt	1
13	C203 2327	Pulley Flange	1
14	C203 2326	Gear - 90Z	1
15	C219 2315	Tension Shaft	1
16	C209 2214	Gear - 40Z	1
17	C209 2216	Driver Shaft	1
18	C203 2215	Gear - 18T	1
19	C203 2311	Gear Flange	1
20	C207 2209	Pulley - 60Z	1
21	C200 2267	Spacer	2
22	C219 2217	Collar	1
23	C209 2207	Pulley - 12Z	1
24	C207 2210	Timing Belt - 100S4.5M297	1
25	C207 2211	Bearing Stopper	1
26	C223 2309	Support Plate	1
27	C209 2308	Support Bracket - Rear Cover	1
28	C209 2330	Drum Drive Gear/pulley Ass'y	1
29	C221 2210	Driven Gear Ass'y	1

Index No.	Part No.	Description	Q'ty Per Assembly
100	0323 0060Z	Philips Sunk Screw - M3x6	
101	0594 0080E	Bolt - M4x8	
102	0805 3134	Ball Bearing - 10x26x8mm	
103	0725 0100Z	Retaining Ring - M10	
104	0804 4048	Spring Pin - 4x20	
105	0804 4046	Spring Pin - 4x16	
106	0574 0040E	Hexagon Headless Set Screw - M4x4	
107	0807 7013	Spacer - 10.2x14x0.2 mm	
108	0804 6092	Hexagonal Set Screw	
109	0720 0080Z	Retaining Ring - M8	
110	0595 0120E	Socket Screw - M5X12	
111	0713 0050B	Hexagon Nut - M5	
112	0740 3010	Ball Bearing - 10x26x8mm	
113	0712 0060Z	Hexagon Nut - M6	
114	0741 3807S	Ball Bearing - 7x14x5	
115	0623 0200E	Spring Pin - 3x20mm	
116	0623 0140E	Spring Pin - 3x14mm	
117	0315 0060Z	Philips Screw - 5x6	
118	0741 3908S	Ball Bearing - 8x19x6	
119	0574 0050E	Hexagon Headless Set Screw - M4x5	
120	0960 4008Z	Flange Head Screw - 4x8	

6.DRIVE SECTION 2 (C228)

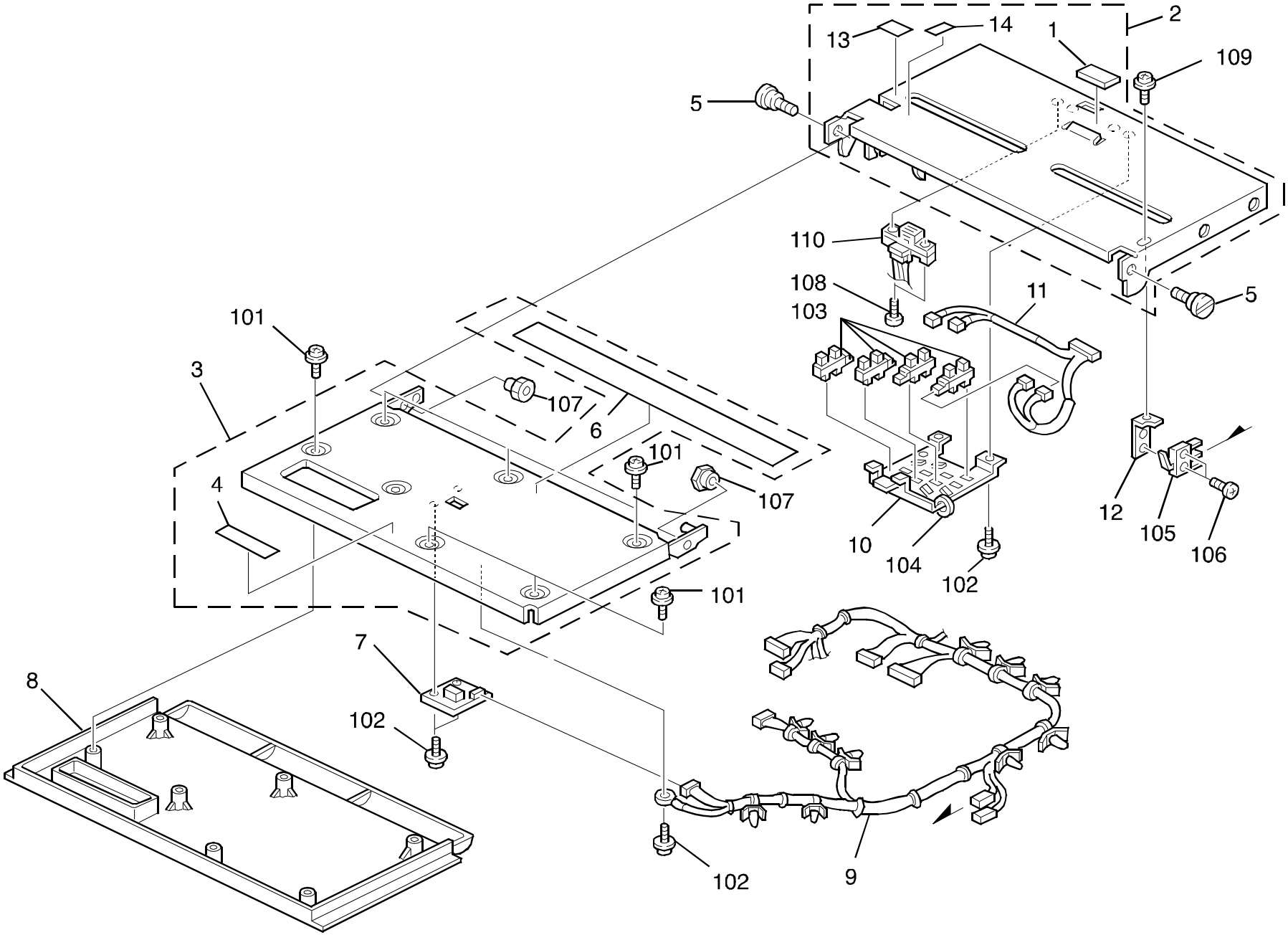


6.DRIVE SECTION 2 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C218 2047	Lift Moter Cover	1
2	C219 8250	Lift Motor - DC 1.69W 0.2A	1
3	C209 2325	Motor Bracket	1
4	5205 2681	Coupled Gear - 17t/50t	1
5	5205 2680	Coupled Gear - 16t/53t	1
6	C209 8280	Image Position Sensor	1
7	C209 2321	Bracket - Image Shifting	1
8	C201 2221	Gear - 40T	1
9	C201 2222	Coupled Gear - 20t & 60t	1
10	C201 2211	Stud	1
11	C201 2211	Stud	1
12	C203 5170	Feed Cam Shaft	1
13	C228 5118	Cam:paper Feed:ass'y	1
14	C228 5122	Cam:feed:double Letter	1
15	C201 2229	Gear - 50T	1
16	C223 2302	Image Shifting Arm - Large	1
17	C200 2311	Image Shifting Link	2
18	C223 2226	Gear - 22Z	2
19	C223 2311	Image Shifting Arm - Small	1
20	C209 2304	Support Side Plate	1
21	C200 2266	Bearing Holder	2
22	C203 2318	Reinforcement Plate	1
23	C228 2072	Feed Gear Stopper Shaft	1
24	C200 5222	Sector Spring	1
25	C228 5184	Sector Gear	1
26	C228 5223	Lift Cam	1
27	C219 5106	Sector Gear Stopper	1
28	C219 2319	Cam Shaft	1
29	C228 5101	Paper Feed Cam Ass'y	1
30	C223 2225	Image Shifting Arm Ass'y	1

Index No.	Part No.	Description	Q'ty Per Assembly
100	0313 0040B	Philips Pan Head Screw - M3x4	
101	0720 0040Z	Retaining Ring - M4	
102	0434 0080Z	Pan Head Self-tapping Screw - M4x8	
103	0314 0080Z	Philips Screw - 4x8	
104	0712 0060Z	Hexagon Nut - M6	
105	0741 3807S	Ball Bearing - 7x14x5	
106	0720 0080Z	Retaining Ring - M8	
107	0807 7055	Holder - Main Shaft	
108	0585 0100Z	Bolt - M5x10	
109	0701 0050Z	Flat Washer - M5	
110	0807 7013	Spacer - 10.2x14x0.2 mm	
111	0720 0080Z	Retaining Ring - M8	
112	0805 3104	Ball Bearing - 8x22x7mm	
113	0801 1135	Philips Pan Head Screw - M3x3	
114	0960 4008Z	Flange Head Screw - 4 X 8	
115	0960 5008Z	Philips Flange Screw - M5x8	
117	0315 0080Z	Philips Screw - 5x8	
118	0701 0040Z	Flat Washer - M4	
119	0594 0060E	Socket Screw - 4X6	
120	0713 0050B	Hexagon Nut - M5	
121	0707 6120B	Bushing - 6x12mm	
122	0573 0050E	Hexagon Headless Set Screw - M3x5	
123	0720 0050Z	Retaining Ring - M5	
124	0314 0060Z	Philips Pan Head Screw - M4x6	
125	0951 4006Z	Philips Screw With Flat Washer - M4	
126	1105 0005	Nylon Clamp - 3n	

7.PAPER TABLE 1 (C228)

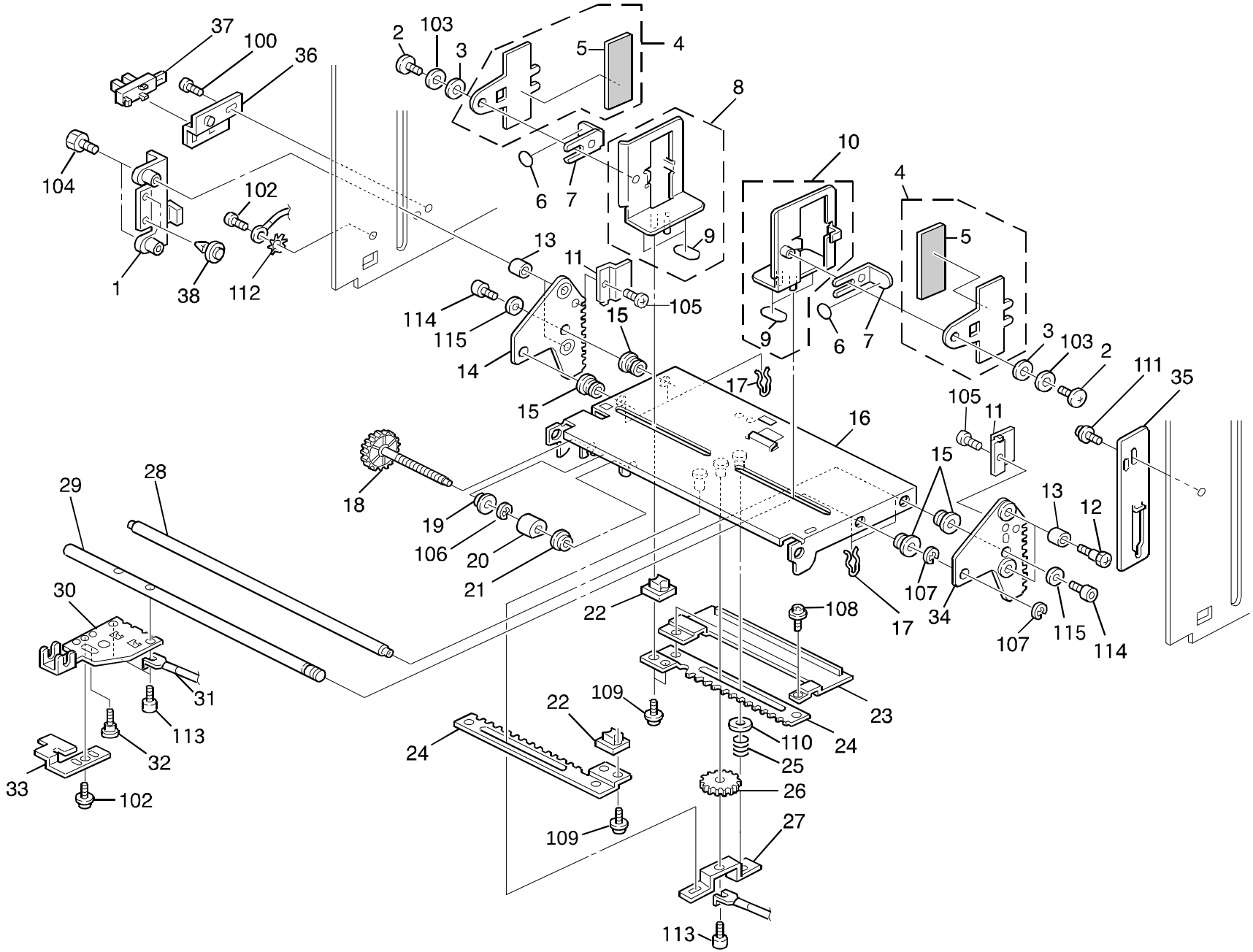


7.PAPER TABLE 1 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	5507 6828	Rubber Plate - Feed Table	1
2	C209 4640	Paper Table Ass'y	1
3	C219 5067	Paper Feed Table Ass'y - A4	1
3	C219 5066	Paper Feed Table Ass'y - LT	1
4	C200 5025	Paper Feed Plate Shield	1
5	C219 5073	Stepped Screw	2
6	C210 2806	Decal - Paper Size (A4)	1
6	C210 2805	Decal - Paper Size (LT)	1
7	C219 8021	Paper Detection Board	1
8	C218 2423	Paper Feed Table Cover	1
9	C219 8113	Harness - Paper Detection Board	1
10	C209 5055	Bracket - Paper Size	1
11	C209 8197	Paper Size Sensor Harness	1
12	C209 5047	Switch Bracket - Paper Table	1
13	C223 2453	Decal - Paper Level	1
14	C223 2452	Decal - Paper Table Knob	1

Index No.	Part No.	Description	Q'ty Per Assembly
101	0965 3010W	Tapping Screw With Flat Washer - M3x1	
102	0951 3005Z	Philips Pan Head Screw - M3x5	
103	1403 0690	Sensor - Tlp1215	
104	1105 0042	Wire Band	
105	1204 2239	Micro Switch	
106	0800 0084	Philips Pan Head Screw - M2.3x12	
107	0713 0040B	Hexagon Nut - M4	
108	0313 0100Z	Philips Pan Head Screw - M3x10	
109	0951 3004Z	Philips Screw With Flat Washer - M3x4	
110	1403 0456	Photosensor - EE-SB5-C3	

8.PAPER TABLE 2 (C228)

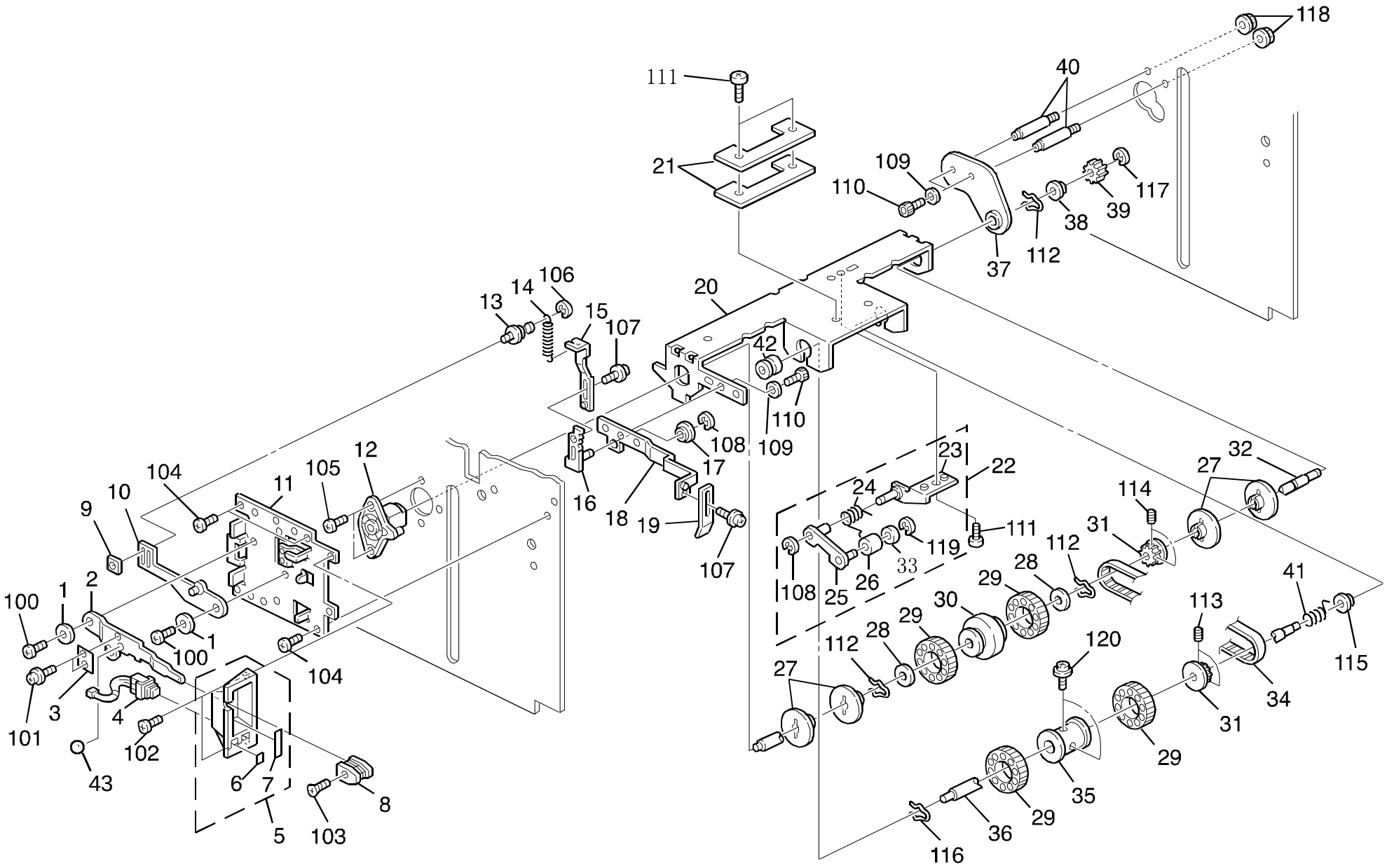


8.PAPER TABLE 2 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C223 5073	Paper Table Fixing Bracket	1
2	5506 1536	Screw - M4X6	2
3	5070 0923	Spring Washer - Rotating Table	2
4	C209 5090	Rubber Plate - Paper Feed Guide	2
5	C200 5287	Rubber Plate - Paper Feed	2
6	C201 5015	Seal - M10	2
7	C209 5092	Rubber Plate Lever	2
8	C223 5082	Left Side Plate	1
9	5506 6314	Mylar - Master Feed Table	2
10	C223 5085	Right Side Plate	1
11	C203 5131	Gear Cover	2
12	C203 5142	Rack Shaft	2
13	5606 2310	Roller	4
14	C223 5128	Left Rack - Paper Feed	1
15	C203 5121	Bushing - 8x12x9mm	4
16	C219 5076	Paper Table	1
17	5600 1107	Snap Retainer - 12	2
18	C218 5054	Table Position Knob	1
19	C203 5113	Bushing - 6x9x3mm	1
20	C203 5116	Washer - 6x13x12mm	1
21	C203 5114	Bushing - 3x6x3mm	1
22	C223 5336	Paper Feed Slider	2
23	C209 5058	Psper Size Plate	1
24	C223 5050	Paper Guide Rack	2
25	5505 7197	Spring - Hinge - Inking	1
26	5309 1023	Pinion Paper Feed Table	1
27	C219 5079	Supporter	1
28	C200 5042	Rear Shaft - Paper Feed	1
29	C223 5123	Front Shaft - Paper Feed	1
30	C223 5055	Paper Table Arm	1
31	C209 8197	Paper Size Sensor Harness	1
32	C223 5124	Stepped Screw - M8.2	1
33	C222 5121	Position Indicator	1
34	C224 5126	Right Rack - Paper Feed	1
35	C209 5235	Paper Table Holder	1

Index No.	Part No.	Description	Q'ty Per Assembly
36	C219 5081	Sensor Bracket	1
37	AW02 0021	Photointerruptor - 175487-3	1
38	C222 3175	Scanner Slider	2
100	0314 0120Z	Philips Screw - 4x12	
102	0314 0080Z	Philips Screw - 4x8	
103	0701 0080Z	Flat Washer - M8	
104	0585 0161B	Hexagon Bolt - M5x16	
105	0951 4008Z	Philips Screw With Flat Washer M4x8	
106	0720 0040Z	Retaining Ring - M4	
107	0720 0060Z	Retaining Ring - M6	
108	0951 3006Z	Philips Screw With Flat Washer - M3x6	
109	0951 3006Z	Philips Screw With Flat Washer - M3x6	
110	0700 0060Z	Flat Washer - M6	
111	0951 3008Z	Philips Screw With Flat Washer - M3x8	
112	0705 0040B	Toothed Washer	
113	0594 0080E	Bolt - M4x8	
114	0594 0060E	Socket Screw - 4X6	
115	0701 0040Z	Flat Washer - M4	

9.PAPER FEED & UPPER SEPARATION ROLLERS (C228)

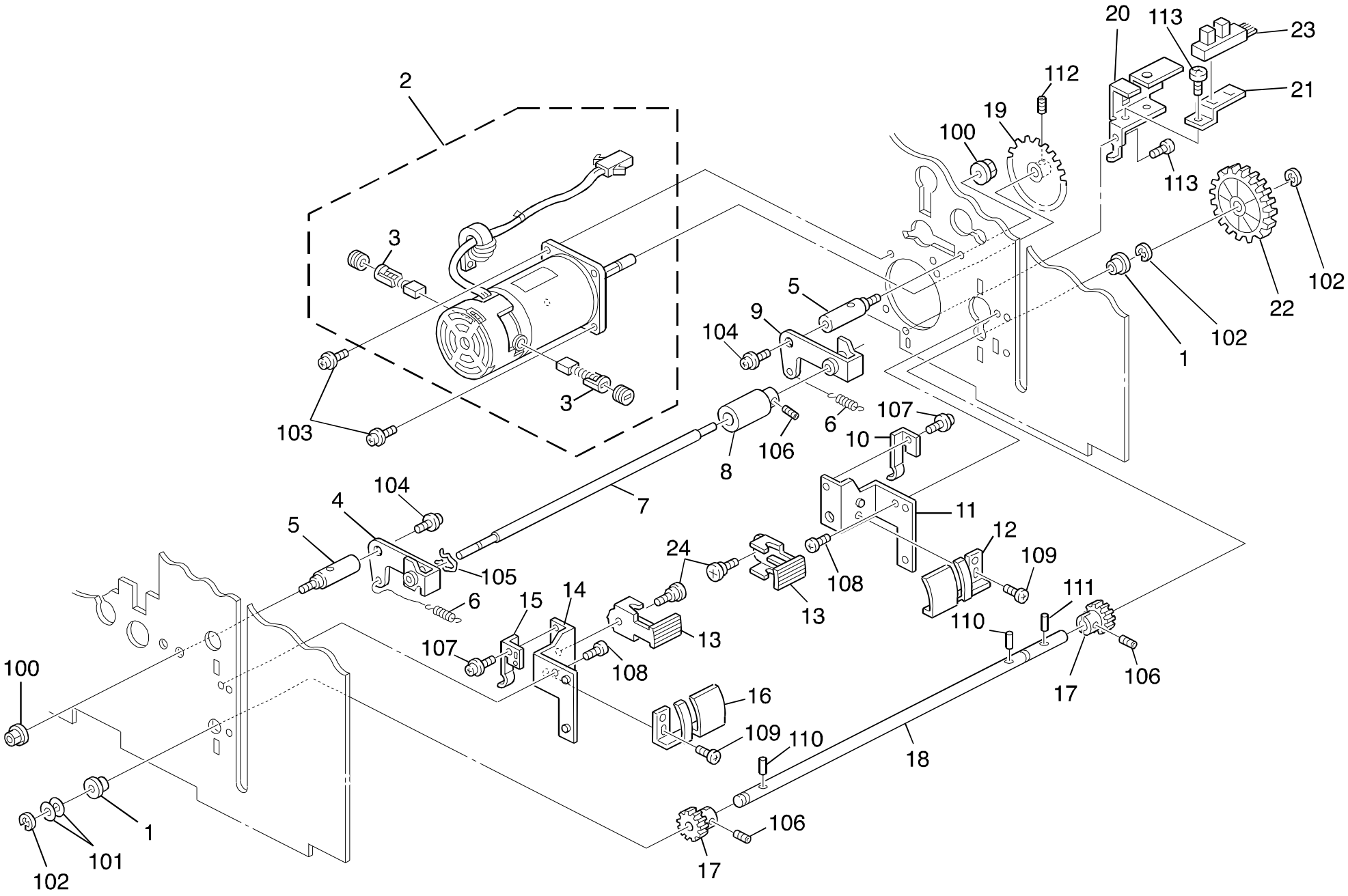


9.PAPER FEED & UPPER SEPARATION ROLLERS (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C209 5220	Spacer - 4x20x6	2
2	C203 5007	Paper Feed Lever	1
3	5501 8180	Flat Spring - Feed Roller Pressure	1
4	C209 8288	Table Down Switch	1
5	C218 2833	Lower Cover - Paper Feed (A4)	1
5	C218 2804	Lever Cover - Paper Feed - LT	1
6	C218 2841	Decal - Paper Table Doun (A4)	1
6	C218 2819	Decal - Paper Table Down (LT)	1
7	C218 2818	Decal - Paper Feed Pressure	1
8	C201 2425	Adjusting Lever	1
9	5506 4235	Plate Nut - Paper Pressure	1
10	C203 5013	Lever Supporter	1
11	C209 2027	Lever Bracket - Paper Feed	1
12	C203 5045	Bushing - 18x24x28mm	1
13	C209 5080	Stepped Screw	1
14	C203 5020	Spring - Feed Roller Pressure	1
15	C209 5081	Spring Link	1
16	C203 5027	Adjusting Plate	1
17	C203 5113	Bushing - 6x9x3mm	1
18	C209 5035	Arm - Feed Roller Holder	1
19	C203 5055	Actuator - Paper Feed Table	1
20	C209 5225	Feed Roller Holder	1
21	C201 5073	Arm Balancer - Feed Roller	2
22	C203 5205	Belt Tensioner Ass'y	1
23	C203 5208	Tension Bracket	1
24	C203 5215	Tension Spring	1
25	C203 5201	Tension Arm	1
26	C203 5200	Tension Roller	1
27	5606 2066	Paper Feed Guide Disc	4
28	5600 1086	Spacer - 10.2x20	2
29	5506 4169	Rubber Roller - Paper Feed	4
30	C207 5023	Separator Roller Ass'y	1
31	5507 6032	Timing Belt Pulley - 30T	2
32	C207 5020	Upper Roller Shaft	1
33	C203 5225	Spacer - Tension - Paper Feed	1

Index No.	Part No.	Description	Q'ty Per Assembly
34	5507 6035	Timing Belt - 162XL	1
35	C228 5033	Core:paper Feed Roller	1
36	C203 5043	Pick-up Roller Shaft	1
37	C219 5030	Bushing	1
38	5053 0419	Bushing - 10mm	1
39	C203 5220	Gear - 18T	1
40	C219 5029	Rear Bushing Shaft	1
41	5507 6038	Torque Limitter - Paper Feed Roller	1
42	5600 1081	Right Bushing - Paper Feed Roller	1
43	5501 8195	Steel Ball 3/16	1
100	0314 0100Z	Philips Screw - 4x10	
101	0951 3006Z	Philips Screw With Flat Washer - M3x6	
102	0801 1004	Screw - M4X4	
103	0323 0100Z	Philips Sunken Head Screw - M3x10	
104	0434 0080Z	Pan Head Self-tapping Screw - M4x8	
105	0314 0080Z	Philips Screw - 4x8	
106	0720 0040Z	Retaining Ring - M4	
107	0951 3005Z	Philips Pan Head Screw - M3x5	
108	0720 0040Z	Retaining Ring - M4	
109	0701 0040Z	Flat Washer - M4	
110	0594 0080E	Bolt - M4x8	
111	0314 0060Z	Philips Pan Head Screw - M4x6	
112	0804 4055	Pin	
113	0574 0040E	Hexagon Headless Set Screw - M4x4	
115	0805 3263	Bearing - 6x10x6mm	
116	5600 1107	Snap Retainer - 12	
117	0720 0050Z	Retaining Ring - M5	
118	0713 0040B	Hexagon Nut - M4	
119	0720 0060Z	Retaining Ring - M6	
120	0951 4010Z	Philips Screw With Flat Washer M4x10	

10.PAPER SEPARATION 1 (C228)

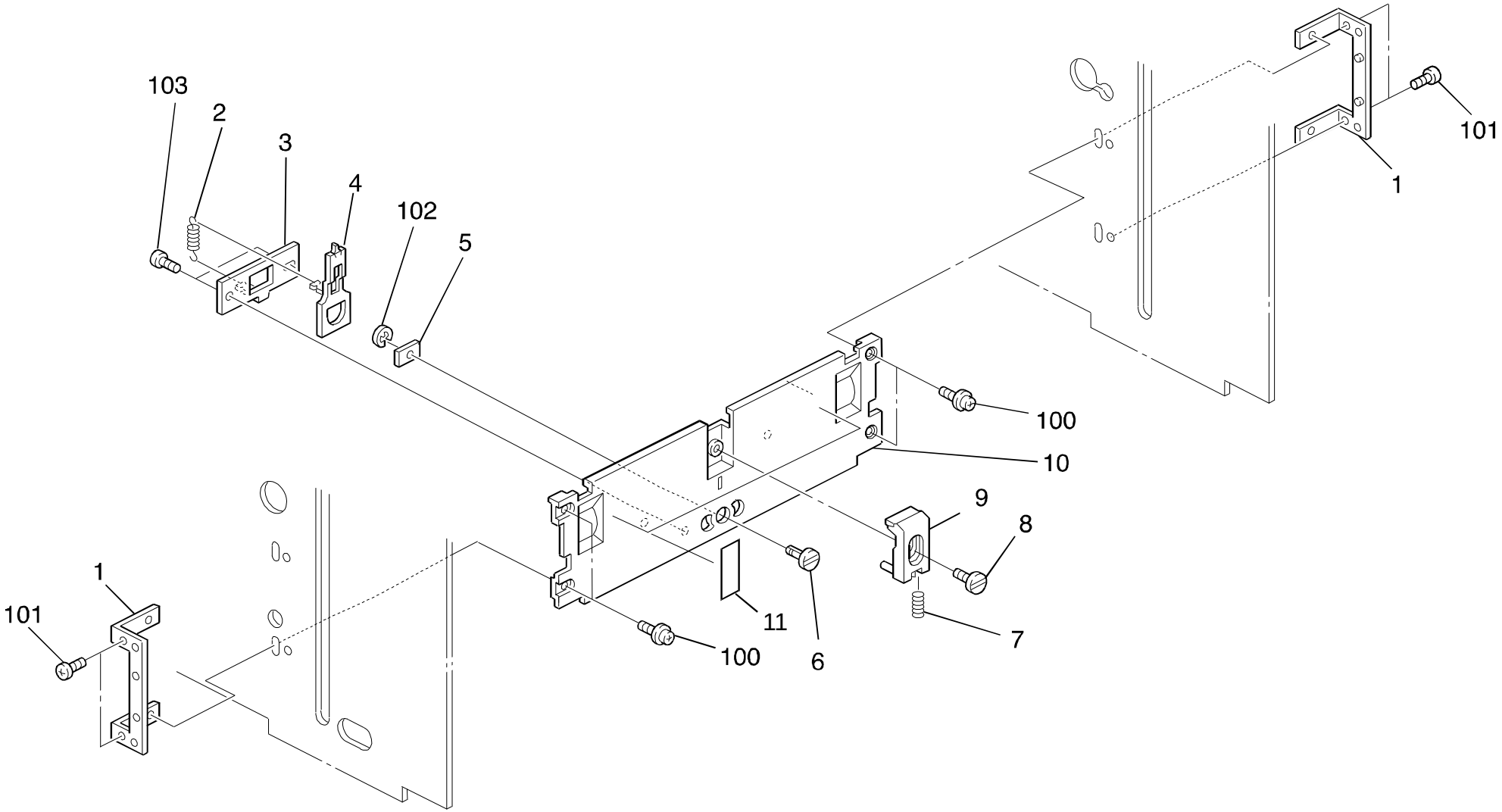


10.PAPER SEPARATION 1 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C203 5135	Bushing - 10x14x5.9	2
2	C218 8200	Main Motor - DC90V 108W	1
3	C209 8202	Commutation Brush	2
4	C228 5062	Left Lever Bracket	1
5	C201 5090	Separation Roller Pressure Stud	2
6	C223 5031	Lower Spring - Separation	2
7	C222 5020	Separation Roller Shaft	1
8	C223 5015	Lower Reverse Roller	1
9	C228 5061	Right Arm - Separation	1
10	C209 5208	Spling Plate - Right Lever	1
11	C209 5206	Right Lever Bracket	1
12	C209 5211	Right Lever Cover	1
13	C209 5209	Separation Pressure Lever	2
14	C209 5205	Left Lever Bracket	1
15	C209 5207	Spring Plate - Left Lever	1
16	C209 5210	Left Lever Cover	1
17	C201 5051	Pinion - 24t	1
18	C223 5133	Paper Lift Shaft	1
19	C203 2309	Pulse Disk	1
20	C219 2205	Bracket - Drum Rotation Sensor	1
21	C219 2306	Drum Sensor Bracket	1
22	C223 5096	Lift Gear	1
23	AW02 0021	Photointerruptor - 175487-3	1
24	5403 2075	Stepped Screw	2

Index No.	Part No.	Description	Q'ty Per Assembly
100	0713 0040B	Hexagon Nut - M4	
101	0807 7013	Spacer - 10.2x14x0.2 mm	
102	0720 0080Z	Retaining Ring - M8	
103	0960 4008Z	Flange Head Screw - 4 X 8	
104	0951 4008Z	Philips Screw With Flat Washer M4x8	
105	0804 4061	Spring Pin - M6	
106	0574 0040E	Hexagon Headless Set Screw - M4x4	
107	0951 3005Z	Philips Pan Head Screw - M3x5	
108	0801 1004	Screw - M4X4	
109	0313 0050Z	Philips Screw - 3x5	
110	0624 0160E	Spring Pin - 4x16mm	
111	0623 0200E	Spring Pin - 3x20mm	
112	0574 0050E	Hexagon Headless Set Screw - M4x5	
113	0314 0080Z	Philips Screw - 4x8	

11.PAPER SEPARATION 2 (C228)

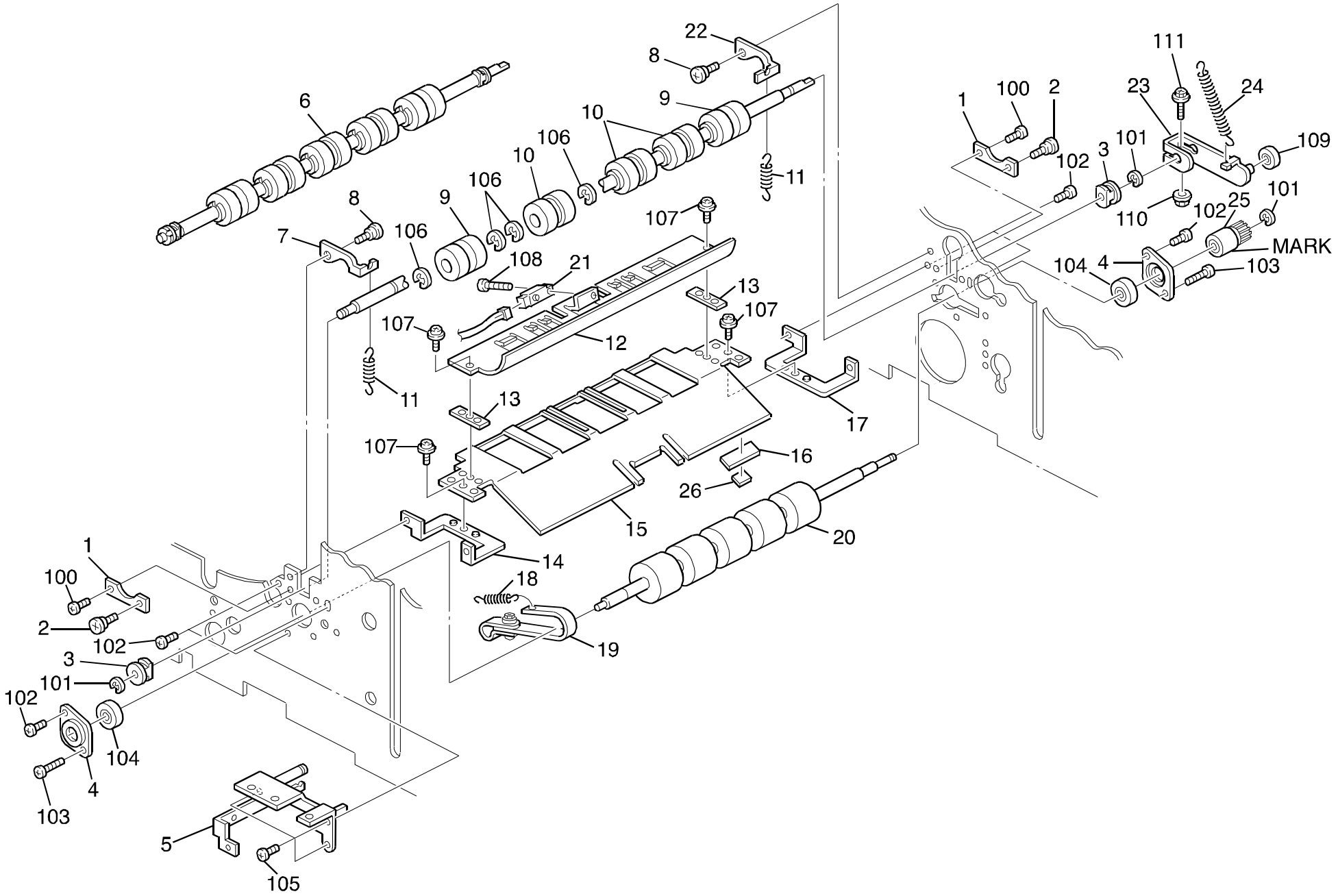


11.PAPER SEPARATION 2 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C201 5075	Guide Plate Bracket	2
2	C207 5013	Pressure Spring - Paper Feed	1
3	C207 5009	Pressure Plate Holder	1
4	C207 5008	Pressure Plate	1
5	C207 5011	Adjusting Plate	1
6	C207 5010	Adjusting Screw	1
7	C207 5012	Pressure Spring	1
8	5507 6060	Guide Screw - Front Plate	1
9	C228 5018	Separation Plate	1
10	C228 5016	Front Side Plate	1
11	C210 2791	Decal - Paper Separation	2

Index No.	Part No.	Description	Q'ty Per Assembly
100	0952 4008W	Philips Screw - M4x8	
101	0434 0080Z	Pan Head Self-tapping Screw - M4x8	
102	0720 0040Z	Retaining Ring - M4	
103	0313 0050W	Philips Pan Head Screw - M3x5	

12.2ND FEED ROLLERS (C228)

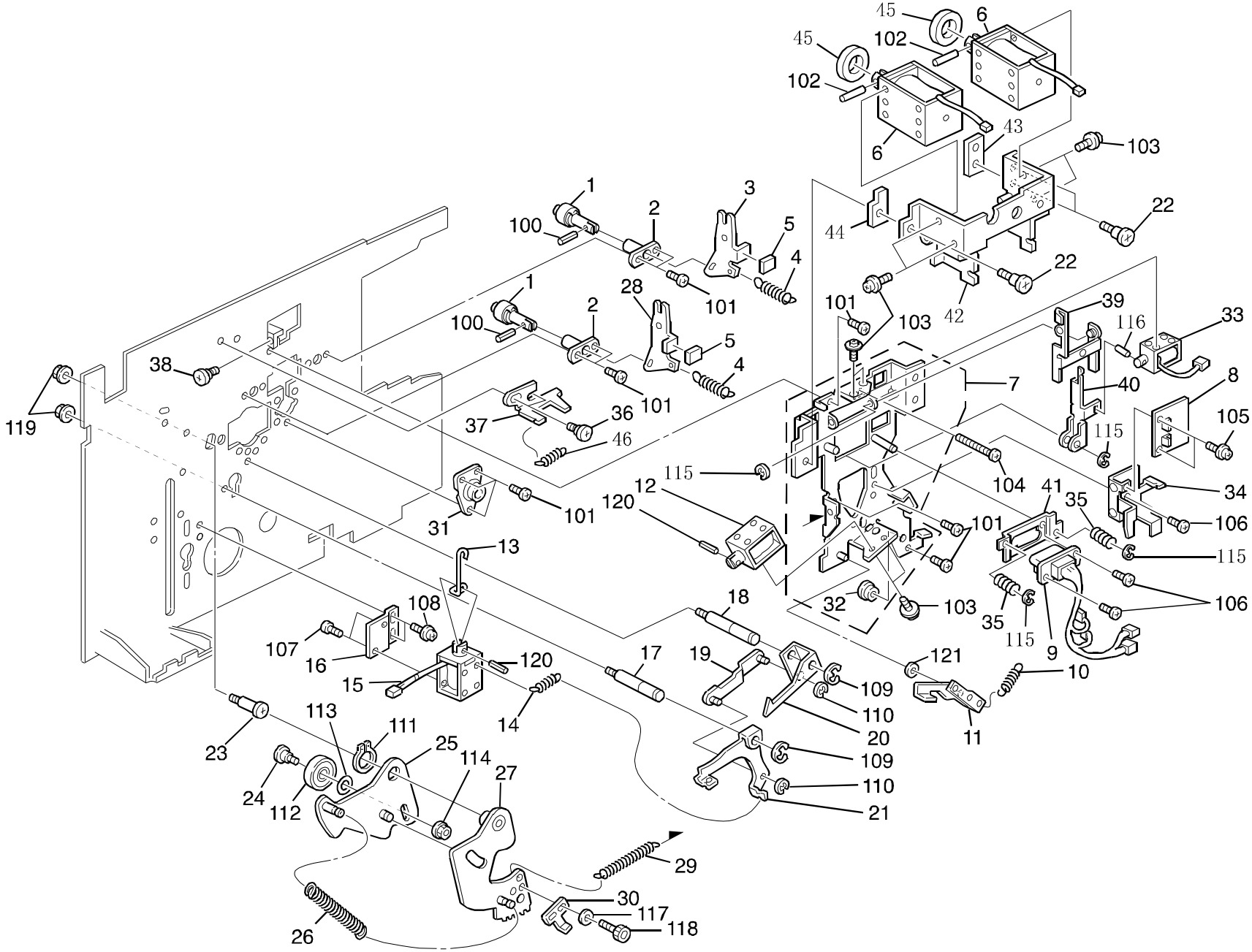


12.2ND FEED ROLLERS (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C200 5153	Bushing Supporter	2
2	C201 5125	Shoulder Screw - M4	2
3	C200 5150	Bushing - 7x18x9mm	2
4	C201 5134	Bearing Holder	2
5	C209 2034	Sensor Bracket	1
6	C207 5138	Upper Feed Roller Ass'y	1
7	C200 5154	Left Spring Arm	1
8	C201 5125	Shoulder Screw - M4	2
9	C200 5340	Upper Feed Roller	2
10	C207 5148	Upper Feed Roller	3
11	5505 6528	Spring - Press Roller	2
12	C228 5123	Upper Guide Plate	1
13	C207 5125	Guide Plate Spacer	2
14	C200 5137	Left Bracket - Guide Plate	1
15	C228 5215	Lower Guide Plate - Adhesion	1
16	C222 5216	Rubber Plate - Guide Plate	1
17	C200 5138	Right Bracket - Guide Plate	1
18	5501 8328	Spring - Feed Roller Brake	1
19	C203 5198	Feed Roller Brake Ass'y	1
20	C228 5203	Lower 2nd Feed Roller	1
21	AW01 0066	Photosensor - PS-R50D1-B	1
22	C200 5155	Right Spring Arm	1
23	C224 5142	Feed Roller Arm	1
24	C201 5145	Lift Arm Spring	1
25	C209 5200	Gear - 14Z	1
26	C223 5218	Guide Plate Sheet - Separation	1

Index No.	Part No.	Description	Q'ty Per Assembly
100	0801 1004	Screw - M4X4	
101	0720 0050Z	Retaining Ring - M5	
102	0314 0080Z	Philips Screw - 4x8	
103	0314 0200Z	Philips Screw - 4x20	
104	0740 3010	Ball Bearing - 10x26x8mm	
105	0434 0080Z	Pan Head Self-Tapping Screw - M4x8	
106	0805 0084	Retaining Ring	
107	0951 4006Z	Philips Screw With Flat Washer - M4	
108	0593 0100E	Bolt M3x10	
109	0740 3808	Ball Bearing - 8x16x5mm	
110	0713 0040B	Hexagon Nut - M4	
111	0804 6090	Hexagon Bolt - M4	

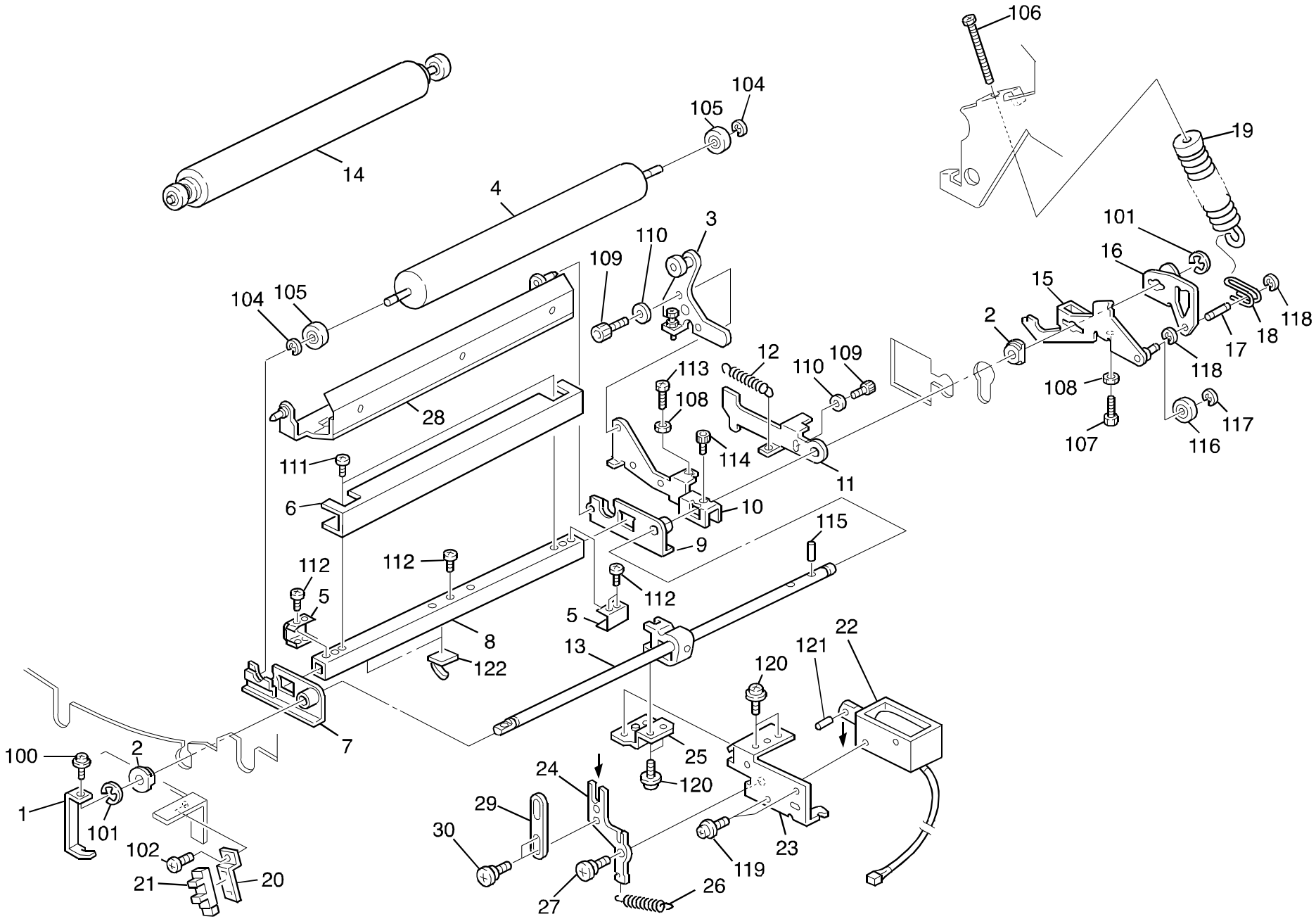
13.PAPER FEED DRIVE (C228)



13.PAPER FEED DRIVE (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C203 4515	Drum Clamper Roller	2
2	C200 4551	Slide Guide	2
3	C223 4553	Master Release Lever	1
4	C200 4561	Clamper Spring	2
5	C223 4398	Lever Cushion	2
6	C223 8224	DC Solenoid Ass'y	2
7	C223 2082	Solenoid Bracket	1
8	C215 8116	Ink Detecting Board	1
9	C223 8119	Drum Harness	1
10	5501 7559	Spring - Master Feed	1
11	C200 5565	Print Pressure Stopper	1
12	C209 8262	Release Solenoid	1
13	C200 5226	Link - Paper Feed Solenoid	1
14	C200 5235	Paper Feed Solenoid Spring	1
15	C209 8262	Release Solenoid	1
16	C200 5225	Bracket - Paper Feed Solenoid	1
17	C219 2073	Stopper Stud - Paper Feed	1
18	C219 2075	Feed Gear Stopper Shaft	1
19	C201 5101	Link	1
20	C219 5109	Feed Sector Stopper	1
21	C219 5108	Sector Stopper - Feed Roller	1
22	5403 6246	Stepped Screw - Cleaning	3
23	C219 5127	Sector Gear Shaft	1
24	C203 5194	Shoulder Screw - M4	1
25	C219 5122	Paper Feed Sector Cam	1
26	C200 5205	Paper Feed Spring	1
27	C224 5101	Sector Gear	1
28	C223 4552	Master Exit Lever	1
29	C200 5222	Sector Spring	1
30	C219 5105	Sector Gear Stopper	1
31	C209 4516	Slide Guide - Drive Shaft	1
32	C203 2083	Exit Pawl Bushing	1
33	C224 8462	Drum Lock Solenoid	1
34	C218 4536	Ink Detecting Board Bracket	1
35	C218 4539	Connector Spring	2
36	C201 5125	Shoulder Screw - M4	2
37	C215 4538	Slid Lock Arm	1
38	5403 2075	Stepped Screw	1
39	C215 4517	Connector Lock Arm	1
40	C215 4537	Connector Lock Lever	1
41	C218 4535	Drum Connector Bracket	1
42	C223 4392	Solenoid Bracket	1
43	C223 4395	Right Cushion	1
44	C223 4396	Left Cushion	1
45	C223 4555	Cushion	2
46	C201 5080	Separation Roller Pressure Spring	1
100	0622 0060E	Spring Pin - 2x6mm	
101	0434 0080Z	Pan Head Self-tapping Screw - M4x8	
102	0623 0100E	Spring Pin - 3x10mm	
103	0804 6101	Hexagon Bolt - M3	
104	0314 0200Z	Philips Screw - 4x20	
105	0951 3006Z	Philips Screw With Flat Washer - M3x6	
106	0314 0100Z	Philips Screw - 4x10	
107	0313 0040Z	Philips Pan Head Screw - M3x4	
108	0951 4006Z	Philips Screw With Flat Washer - M4	
109	0720 0080Z	Retaining Ring - M8	
110	0720 0040Z	Retaining Ring - M4	
111	0725 0220Z	Retaining Ring - M22	
112	0740 3007	Ball Bearing - 7x19x6mm	
113	0807 5004	Washer	
114	0713 0040B	Hexagon Nut - M4	
115	0720 0050Z	Retaining Ring - M5	
116	0623 0140E	Spring Pin - 3x14mm	
117	0701 0040Z	Flat Washer - M4	
118	0594 0060E	Socket Screw - 4X6	
119	0713 0050B	Hexagon Nut - M5	
120	0623 0100E	Spring Pin - 3x10mm	
121	0700 0060G	Flat Washer - M6	

14.PRESS ROLLER (C228)

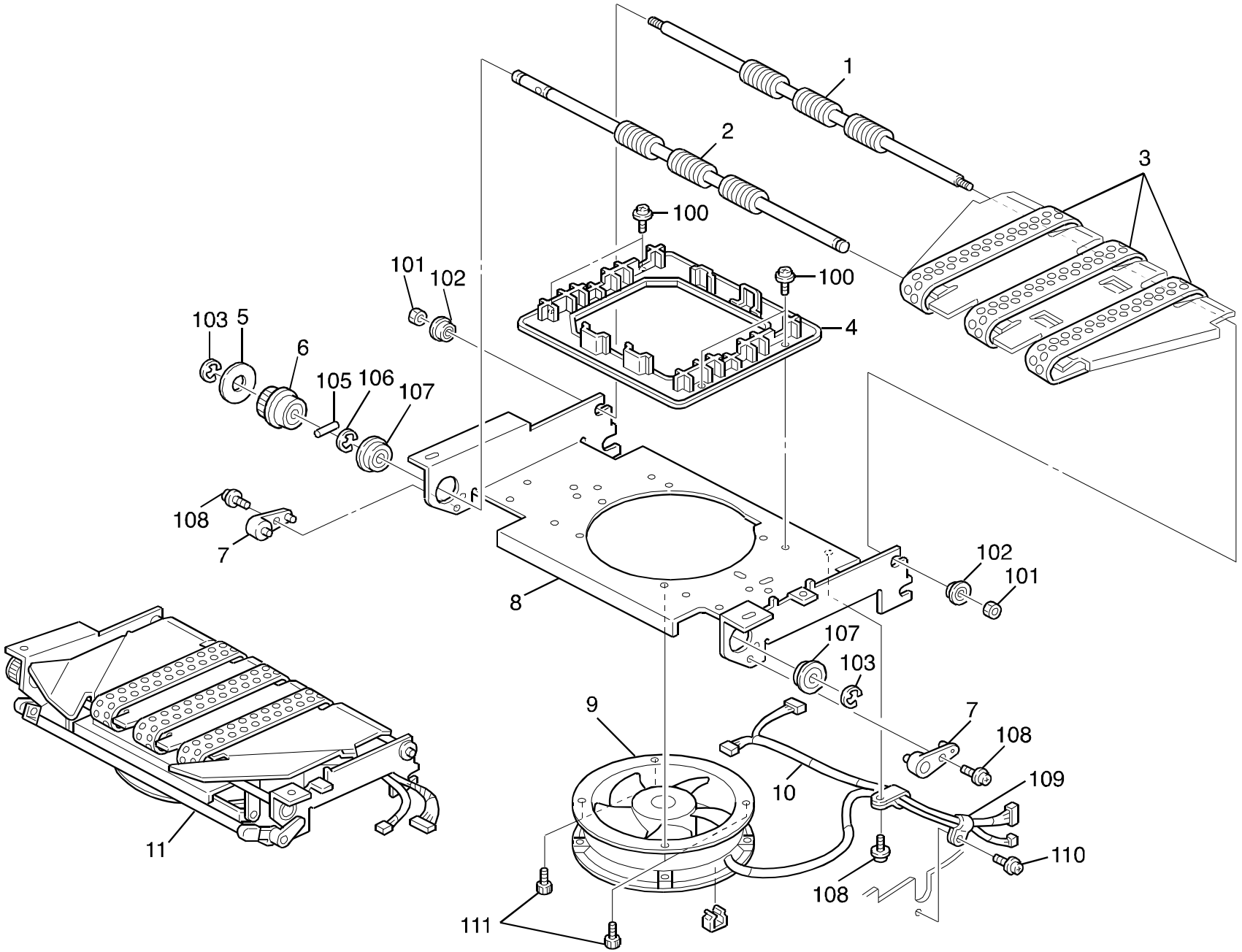


14.PRESS ROLLER (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C209 5507	Sensor Actuaitor	1
2	C200 5526	Print Pressure Bushing	2
3	C221 5573	Pressure On/Off Lever	1
4	C218 5555	Press Roller	1
5	C223 5529	Support Stay	2
6	C223 5547	Rear Guide Plate	1
7	C223 5521	Left Pressure Arm	1
8	C223 5528	Pressure Stay	1
9	C223 5525	Right Pressure Arm	1
10	C221 5570	Adjusting Plate - Exit Pawl	1
11	C223 6004	Stripper Pawl Cam	1
12	5607 2814	Roller Spring	1
13	C223 5603	Pressure Shaft - A3	1
14	C218 5554	Press Roller Ass'y	1
15	C228 5566	Pressure On/off Lever	1
16	C200 5541	Print Pressure Arm	1
17	C209 5521	Joint Shaft	1
18	C209 5543	Press Roller Spring Link	1
19	C218 5526	Spring	1
20	C219 2306	Drum Sensor Bracket	1
21	AW02 0021	Photointerruptor - 175487-3	1
22	C222 8236	Press Roller Solenoid	1
23	C223 5575	Solenoid Braket	1
24	C223 5576	Drive Arm	1
25	C223 5255	Solenoid Suppport Braket	1
26	C222 5275	Tension Spring	1
27	AA14 3062	Shoulder Screw - M4	1
28	C228 5587	Bracket Sheet Ass'y	1
29	C223 5586	Drive Arm Slider	1
30	AA14 3285	Stepped Screw	

Index No.	Part No.	Description	Q'ty Per Assembly
100	0951 4008Z	Philips Screw With Flat Washer M4x8	
101	0720 0120Z	Retaining Ring - M12	
102	0314 0100Z	Philips Screw - 4x10	
104	0720 0060Z	Retaining Ring - M6	
105	0740 3007	Ball Bearing - 7x19x6mm	
106	0586 0451Z	Hexagon Bolt - M6x45	
107	0584 0121Z	Hexagon Bolt - M4x12	
108	0710 0040Z	Hex Nut 4	
109	0594 0060E	Socket Screw - 4X6	
110	0701 0040Z	Flat Washer - M4	
111	0433 0080Z	Tapping Screw - M3x8	
112	0313 0060Z	Philips Pan Head Screw - M3x6	
113	0584 0101Z	Hexagon Bolt - M4x10	
114	0595 0140E	Hexagon Bolt - M5x14	
115	0804 4060	Spring Pin - M4x22	
116	0740 3206	Ball Bearing - 6x19x6	
117	0720 0040Z	Retaining Ring - M4	
118	0720 0030Z	Retaining Ring - M3	
119	0951 3004Z	Philips Screw With Flat Washer - M3x4	
120	0960 3006Z	Philips Flange Screw - M3x6	
121	0623 0100E	Spring Pin - 3x10mm	
122	1105 0021	Cord Clamper	

15.PAPER EXIT SECTION 1 (C228)

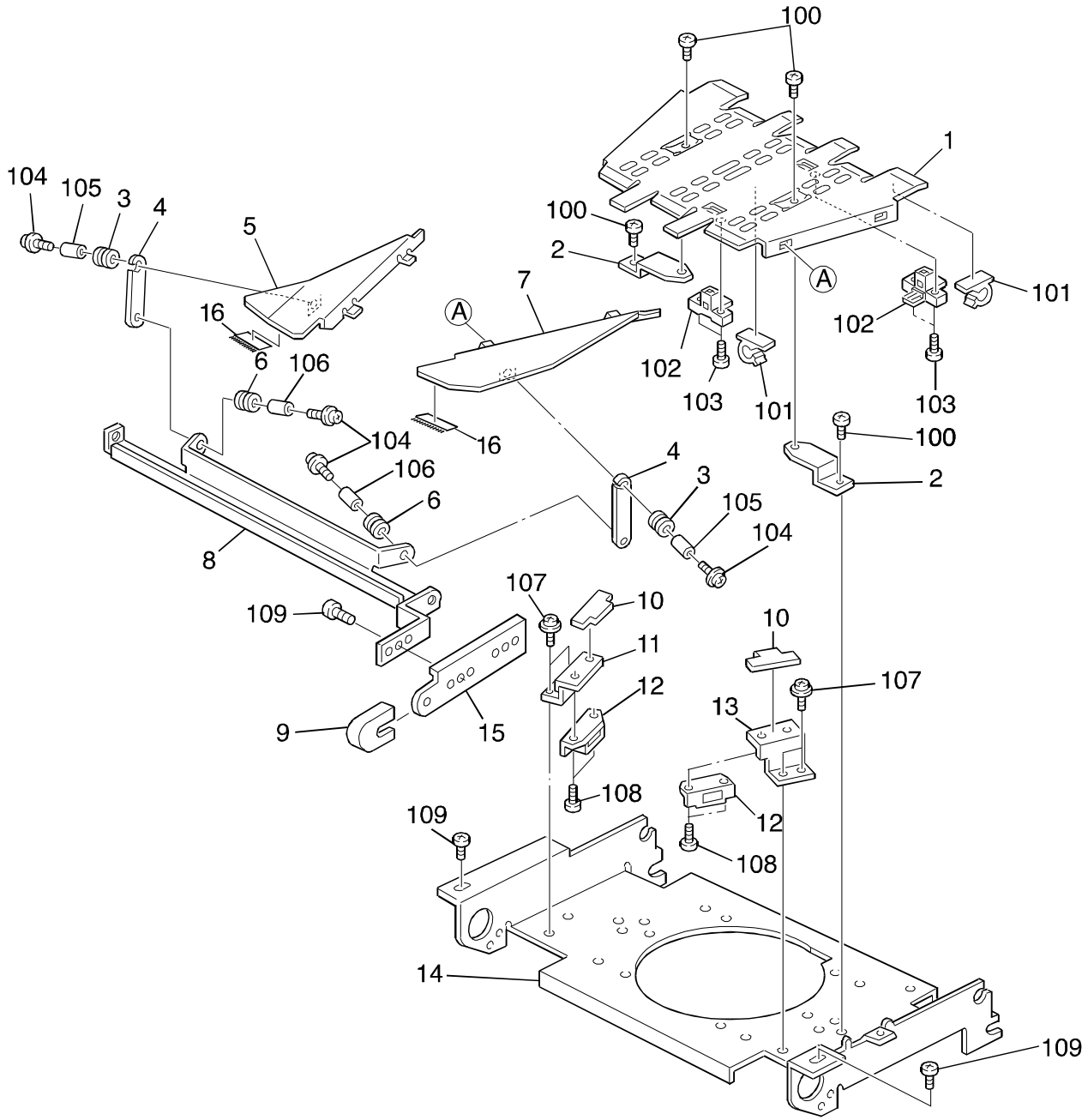


15.PAPER EXIT SECTION 1 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C223 6019	Idler Roller - Transport Belt	1
2	C209 6009	Drive Roller - Transport Belt	1
3	C209 6016	Transport Belt	3
4	C209 6017	Vacuum Duct	1
5	C203 6065	Pulley Flange	1
6	C219 6080	Adjusting Lever Shaft	1
7	C209 6052	Drive Roller Arm	2
8	C221 6002	Vacuum Base	1
9	C209 8204	Vacuum Fan Motor	1
10	C209 8107	Brower Moter Harness	1
11	C221 1027	Delivery Table Ass'Y	1

Index No.	Part No.	Description	Q'ty Per Assembly
100	0951 4008Z	Philips Screw With Flat Washer M4x8	
101	0712 0060Z	Hexagon Nut - M6	
102	0741 3506	Ball Bearing - 6x12x4 Mm	
103	0720 0080Z	Retaining Ring - M8	
105	0623 0160E	Spring Pin - 3x16mm	
106	0720 0080Z	Retaining Ring - M8	
107	0805 3452	Ball Bearing - 10x22x6mm	
108	0951 4008Z	Philips Screw With Flat Washer M4x8	
109	1105 0016	Nylon Clamp - 4n	
110	0960 4008Z	Flange Head Screw - 4x8	
111	0594 0120E	Hexagon Bolt - M4x12	

16.PAPER EXIT SECTION 2 (C228)

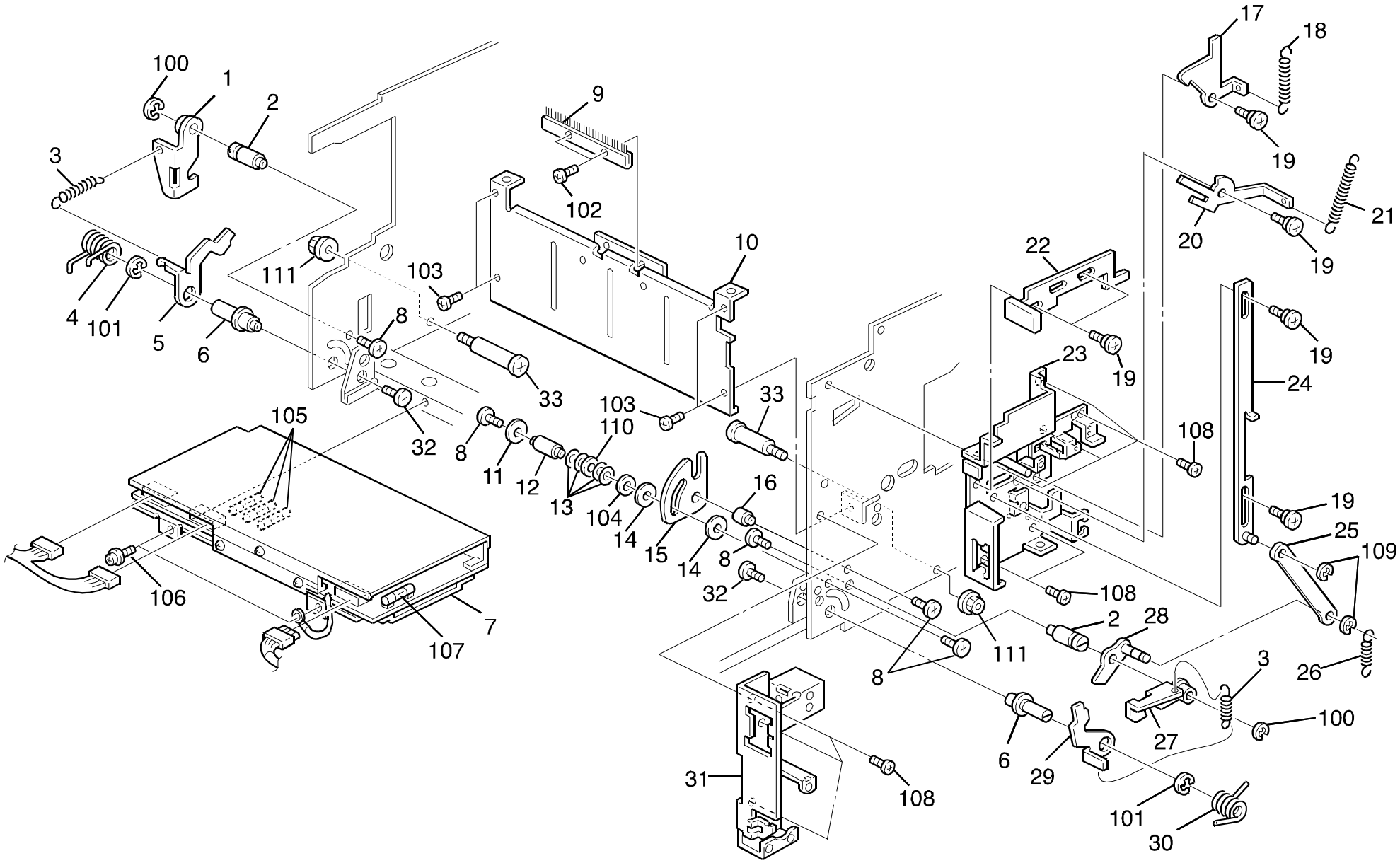


16.PAPER EXIT SECTION 2 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C209 6005	Vacuum Plate	1
2	C209 6003	Vacuum Plate Bracket	2
3	C203 6047	Rubber Washer	2
4	C203 6046	Link - Wing	2
5	C209 6028	Transport Right Wing	1
6	C209 6050	Bushing - 4x8x6 Mm	2
7	C209 6025	Transport Left Wing	1
8	C221 6051	Support Arm	1
9	C209 4059	Lever Knob	1
10	C203 6035	Magnet Plate	2
11	C221 6037	Right Support Plate	2
12	AG07 0004	Magnetic Catch	1
13	C221 6038	Left Support Plate	1
14	C221 6002	Vacuum Base	1
15	C221 6048	Small Arm	1
16	C228 6030	Autistic Brush - 35mm	2

Index No.	Part No.	Description	Q'ty Per Assembly
100	0434 0080Z	Pan Head Self-tapping Screw - M4x8	
101	1105 0172	Clamp	
102	1403 0691	Photo Sensor	
103	0313 0100Z	Philips Pan Head Screw - M3x10	
104	0951 3012Z	Philips Screw W/h Flat Washer - M3x12	
105	0707 3050B	Bushing - 3x5mm	
106	0707 3080B	Bushing - M3x8	
107	0964 3006Z	Tapping Screw With Flat Washer - M3	
108	0313 0040Z	Philips Pan Head Screw - M3x4	
109	0314 0080Z	Philips Screw - 4x8	

17.PAPER EXIT SECTION 3 (C228)

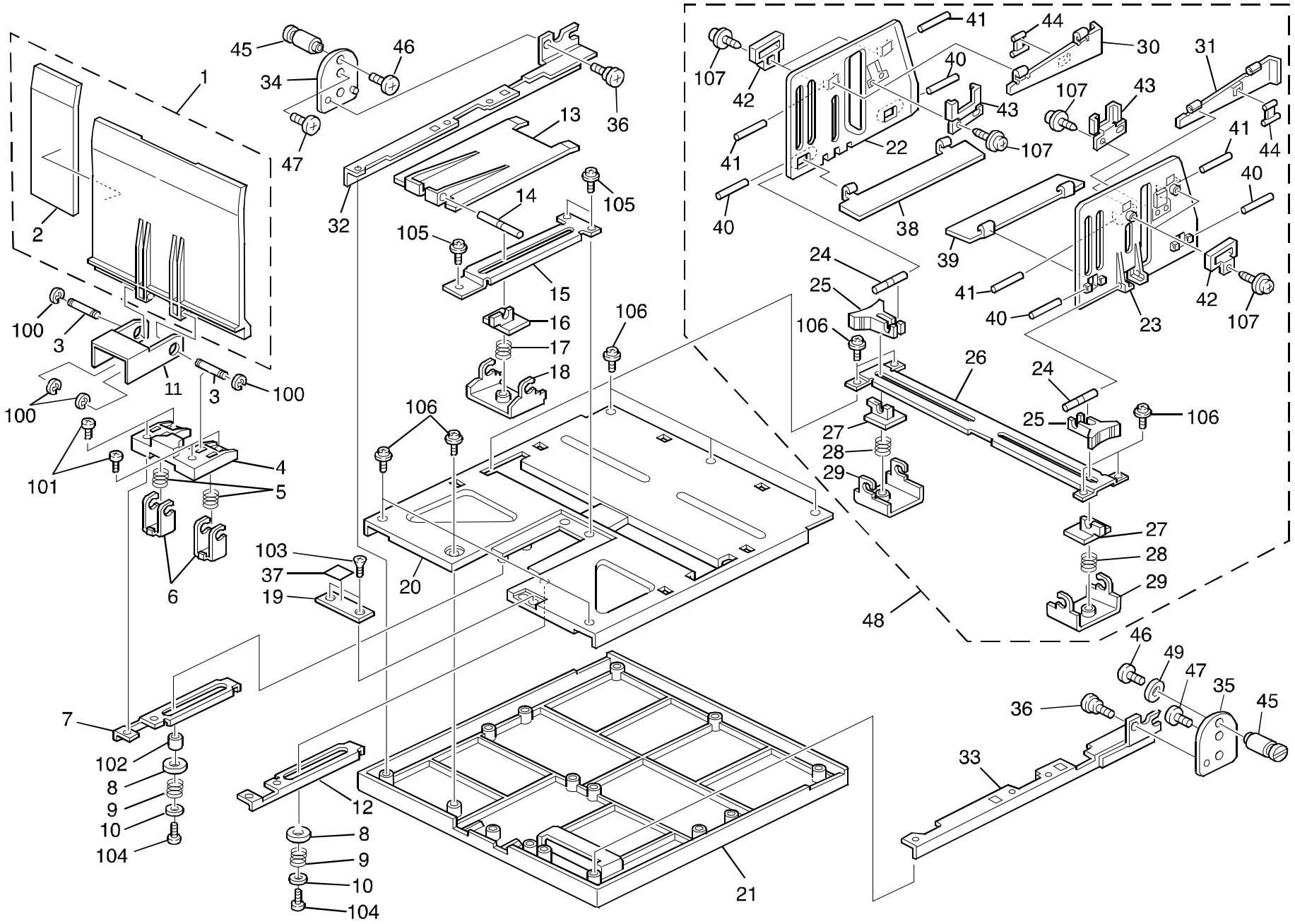


17.PAPER EXIT SECTION 3 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C209 6110	Right Exit Cam	1
2	C209 6104	Exit Cam Shaft	2
3	C209 6114	Tension Spring	2
4	C209 6116	Right Adjusting Lever Spring	1
5	C209 6113	Right Adjusting Lever	1
6	C221 6118	Adjusting Lever Shaft	2
7	C222 8301	Power Supply Unit	1
8	5506 6197	Screw - Knife Cam - Leading Edge CL	5
9	C219 6084	Antistatic Brush	1
10	C223 6081	Exit Guide Plate	1
11	C209 6179	Spacer - 4x18x2	1
12	C209 6177	Stud - M4x11	1
13	C209 6180	Spring Washer - M8	4
14	C209 6178	Spacer 8x20x2	14
15	C209 6176	Delivery Table Angle	1
16	C209 6175	Stud - M4	1
17	C200 3953	Middle Lever	1
18	C200 3956	Middle Lever Spring	1
19	C219 3950	Stepped Screw	6
20	C200 3954	Lower Lever	1
21	C200 3957	Lower Lever Spring	1
22	C218 2160	Upper Lever	1
23	C218 2164	2nd Left Side Plate	1
24	C209 6188	Sensor Actuator - Delivery Table	1
25	C209 6196	Actuator Link - Delivery Table	1
26	5501 7559	Spring - Master Feed	1
27	C209 6107	Left Exit Cam	1
28	C209 6193	Lock Arm - Delivery Table Sensor	1
29	C209 6112	Left Adjusting Lever	1
30	C209 6115	Left Adjusting Lever Spring	1
31	C219 2109	Key Counter Bracket	1
32	5603 1045	Screw - M5	2
33	C219 2111	Shaft	2

Index No.	Part No.	Description	Q'ty Per Assembly
100	0720 0060Z	Retaining Ring - M6	
101	0720 0100Z	Retaining Ring - M10	
102	0313 0040Z	Philips Pan Head Screw - M3x4	
103	0314 0080Z	Philips Screw - 4x8	
104	0701 0080Z	Flat Washer - M8	
105	1107 0415	Fuse (Glass Case) - 5A - 125V	
106	0951 3008Z	Philips Screw With Flat Washer - M3x8	
107	1107 0354	Fuse - 3.15A 125V	
108	0434 0080Z	Pan Head Self-tapping Screw - M4x8	
109	0720 0040Z	Retaining Ring - M4	
110	0807 5013	Flat Washer - M8.4	
111	0713 0050B	Hexagon Nut - M5	

18.PAPER EXIT SECTION 4 (C228)

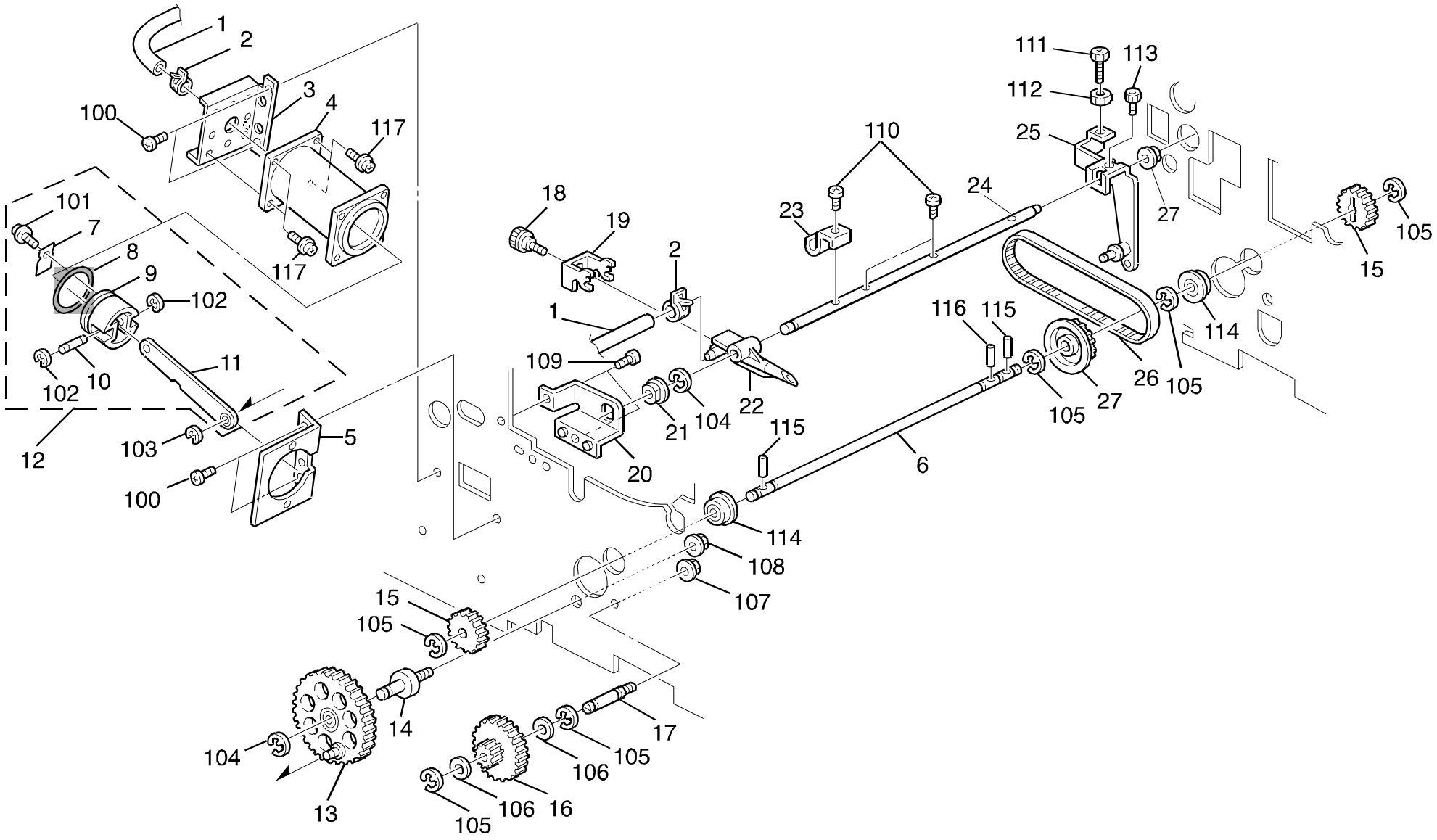


18.PAPER EXIT SECTION 4 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
*	C228 6271	Delivery Table Unit (LT)	1
*	C228 6101	Delivery Table Unit (A4)	1
1	C227 6184	End Fence	1
2	C227 6196	End Fence Cushion	1
3	C226 6167	End Fence Shaft	2
4	C209 6160	End Fence Base	1
5	C227 6159	End Fence Spring - Large	2
6	C209 6158	End Fence Bracket	2
7	C209 6162	Right Rail - End Fence (A4)	1
7	C210 6255	Right Rail - End Fence (LT)	1
8	C209 6163	Spacer - 10x18x1	2
9	C209 6164	Rail Spring - End Fence	2
10	C209 6168	End Fence Washer	2
11	C228 6166	End Fence Support Plate	1
12	C209 6161	Left Rail - End Fence (A4)	1
12	C210 6254	Left Rail - End Fence (LT)	1
13	C209 6183	Small End Fence	1
14	C209 6144	Guide Fence Shaft	1
15	C209 6151	End Fence Support Rail	1
16	C209 6142	Guide Fence Slider	1
17	C209 6150	End Fence Spring	1
18	C209 6153	Bracket - Support End Fence	1
19	C209 6136	Magnet Plate	1
20	C210 6262	Delivery Table (A4)	1
20	C210 6253	Delivery Table (LT)	1
21	C218 6119	Delivery Table Cover	1
22	C227 6147	Front Guide Fence	1
23	C227 6146	Rear Guide Fence	1
24	C209 6144	Guide Fence Shaft	2
25	C209 6143	Guide Fence Knob	2
26	C209 6141	Guide Fence Rail	1
27	C227 6142	Guide Fence Slider	2
28	C227 6157	Guide Fence Spring	2
29	C227 6145	Guide Fence Bracket	2
30	C227 6173	Upper Guide - Rear Fence	1

Index No.	Part No.	Description	Q'ty Per Assembly
31	C227 6172	Upper Guide - Front Fence	1
32	C221 6131	Right Stay - Delivery Table	1
33	C221 6130	Left Stay - Delivery Table	1
34	C221 6128	Support Plate - Right Stay	2
35	C221 6127	Support Plate - Left Stay	2
36	5607 3927	Stepped Screw - M3x8	2
37	C209 6137	Magnet Catch Cover	1
38	C227 6167	Lower Guide - Front Fence (A4)	1
38	C222 6167	Lower Guide - Front Fence (LT)	1
39	C227 6166	Lower Guide - Rear Fence (A4)	1
39	C222 6166	Lower Guide - Rear Fence (LT)	1
40	C227 6155	Lower Guide Shaft	4
41	C227 6156	Upper Guide Shaft	4
42	C227 6158	Guide Stopper	4
43	C227 6160	Upper Guide Spring Plate	2
44	C227 6162	Upper Guide Link	2
45	C209 6126	Stud - M4	2
46	5506 6197	Screw - Knife Cam - LEADING EDGE CL	2
47	5603 1045	Screw - M5	2
48	C227 6138	Exit Guide Plate Ass'y(A4)	1
48	C222 6138	Exit Guide Plate Ass'y (LT)	1
49	C209 6163	Spacer - 10x18x1	1
100	0720 0030Z	Retaining Ring - M3	
101	0343 0060W	Philips Pan Head Screw - M3x6	
102	0707 8105B	Bushing - M8x10.5	
103	0323 0060Z	Philips Sunk Screw - M3x6	
104	0313 0060Z	Philips Pan Head Screw - M3x6	
105	0450 3008W	Philips Tapping Screw - M3x8	
106	0965 3012W	Tapping Screw With Flat Washer - M3	
107	0450 4008W	Philips Tapping Screw - M4x8	

19.PAPER EXIT SECTION 5 (C228)

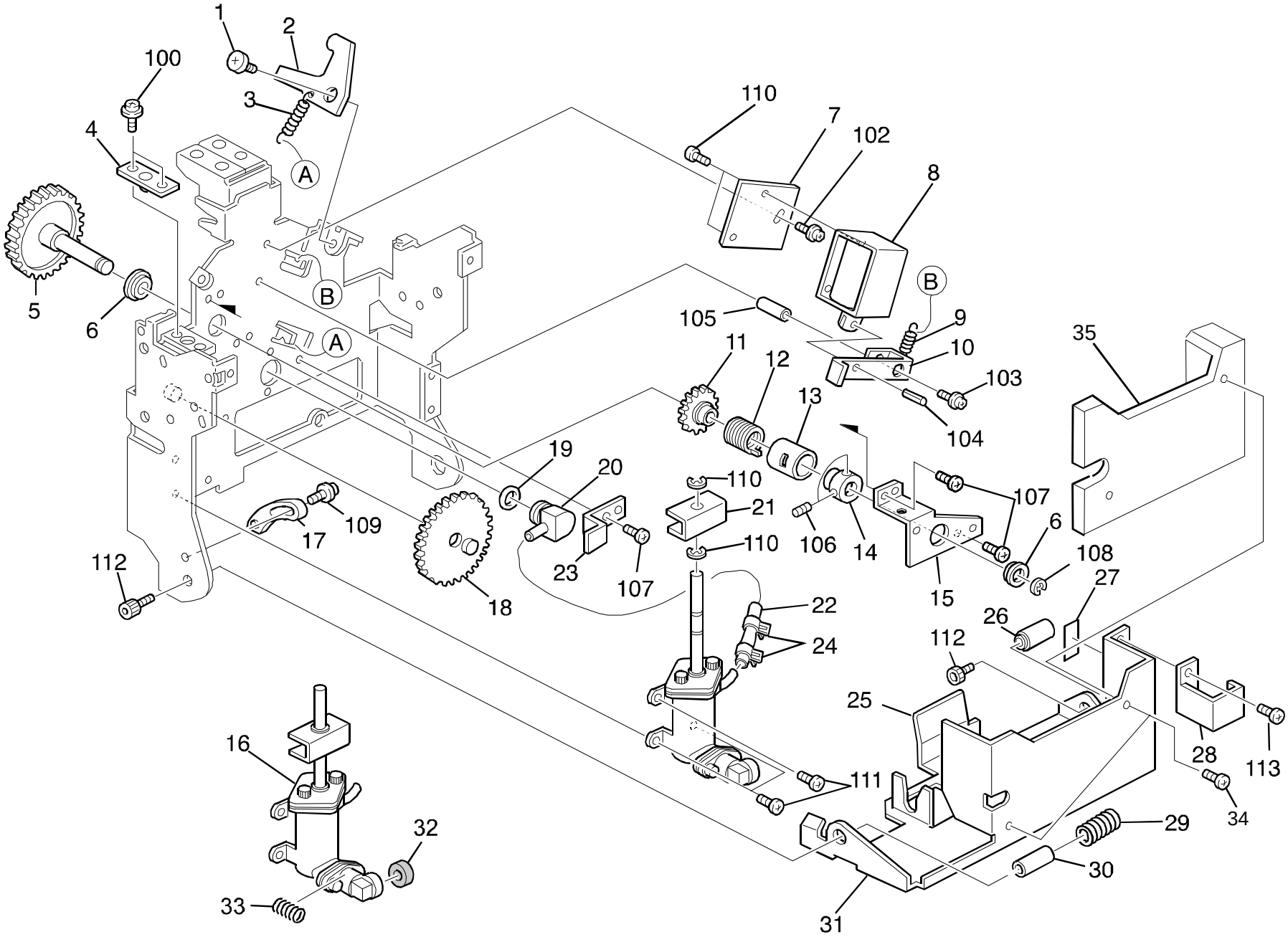


19.PAPER EXIT SECTION 5 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C218 6219	Air Hose	1
2	C209 4711	Hose Band	1
3	C209 6241	Front Cylinder Bracket	1
4	C209 6240	Air Pump Cylinder	1
5	C209 6242	Rear Sylinder Bracket	1
6	C209 6065	Drive Shaft - Vacuum Roller	1
7	C209 6215	Piston Valve	1
8	C209 6216	O-ring - 39	1
9	C200 6059	Pulley - 25T	1
10	C209 6213	Piston Pin - Air Pump	1
11	C209 6211	Piston Link - Air Pump	1
12	C209 6203	Air Piston Ass'y	1
13	C209 6207	Gear - 75Z	1
14	C209 6210	Air Pump Drive Shaft	1
15	C209 6064	Gear - 28Z	2
16	C209 6204	Gear - 18/48Z	1
17	C209 6206	Gear Shaft	1
18	C209 6231	Knob Screw - M4	1
19	C209 6230	Exit Pawl Holder	1
20	C209 6223	Exit Pawl Bracket	1
21	5053 0223	Bushing - 8mm	1
22	C209 6233	Exit Pawl	1
23	C209 6225	Hose Clamp	1
24	C209 6232	Exit Pawl Shaft	1
25	C200 6004	Exit Pawl Lever	1
26	C209 6067	Timing Belt - 220XL025G	1
27	C203 2083	Exit Pawl Bushing	1

Index No.	Part No.	Description	Q'ty Per Assembly
100	0314 0080Z	Philips Screw - 4x8	
101	0433 0060W	Tapping Screw - M3x6	
102	0720 0030Z	Retaining Ring - M3	
103	0720 0040Z	Retaining Ring - M4	
104	0720 0060Z	Retaining Ring - M6	
105	0720 0080Z	Retaining Ring - M8	
106	0807 7013	Spacer - 10.2x14x0.2 mm	
107	0713 0050B	Hexagon Nut - M5	
108	0713 0080B	Flanged Hexagon Nat - M8	
109	0314 0050Z	Philips Pan Head Screw - M4x5	
110	0313 0060Z	Philips Pan Head Screw - M3x6	
111	0584 0121Z	Hexagon Bolt - M4x12	
112	0710 0040Z	Hex Nut 4	
113	0593 0080E	Bolt - M3x8	
114	0805 3452	Ball Bearing - 10x22x6mm	
115	0623 0160E	Spring Pin - 3x16mm	
116	0623 0180E	Spring Pin - 3x18mm	
117	0960 4008Z	Flange Head Screw - 4x8	

20.DRUM SECTION 1 (C228)

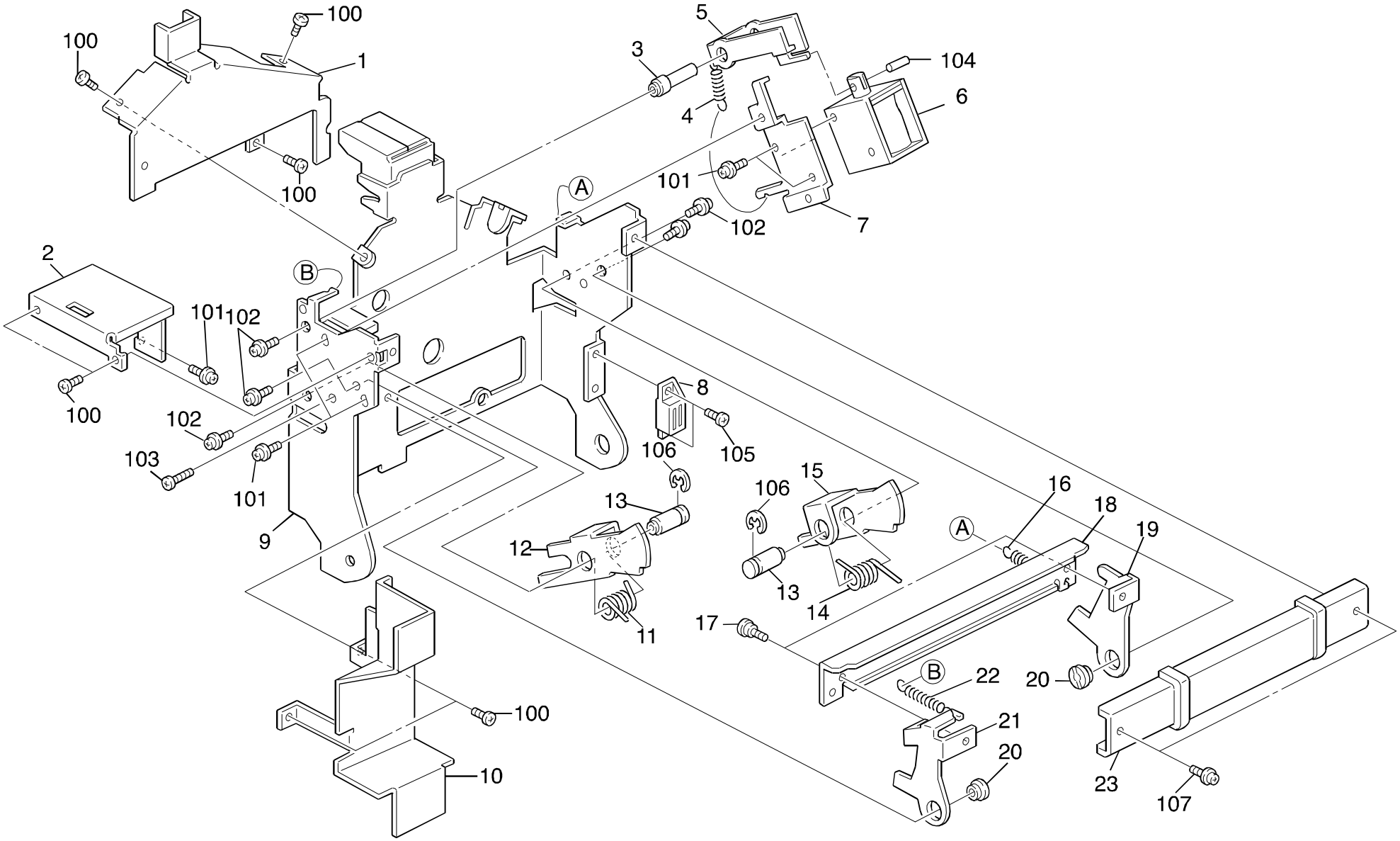


20.DRUM SECTION 1 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	5413 1882	Stepped Screw	1
2	C209 4529	Drum Stopper	1
3	C200 4914	Drum Stopper Spring	1
4	C200 4814	Bushing - 6x10x55mm	1
5	C209 4852	Gear - 46Z	1
6	5507 6624	Bushing - 8x16x45mm	2
7	C200 4864	Bracket - Ink Supply Solenoid	1
8	C209 8227	Ink Supply Solenoid	1
9	5505 3598	Spring - Ratch - Control Section	1
10	C200 4862	Ink Stopper	1
11	C209 4674	Gear - 25Z	1
12	C201 4676	Clutch Spring	1
13	C200 4861	Pump Clutch Sleeve	1
14	C201 4067	Pump Clutch Collar	1
15	C209 4677	Clutch Bracket	1
16	C222 4670	Ink Pump	1
17	C200 4926	Ink Holder Cam	1
18	C209 4867	Gear - 64Z	1
19	0808 0021	Rubber Ring	1
20	C213 4810	Ink Antechamber	1
21	C201 4679	Ink Pump Slider	1
22	C209 4817	Ink Tube - Small	1
23	C209 4816	Stopper Plate - Ink Antechamber	1
24	C223 4713	Hose Band	2
25	C200 4826	Pump Rubber	1
26	C209 4923	Right Shaft - Ink Holder	1
27	C209 4930	Seal - 0.1x5x17	1
28	C201 4639	Ink Holder Handle	1
29	C201 4682	Ink Cartridge Spring	1
30	C200 4924	Right Shaft - Ink Holder	1
31	C209 4641	Ink Holder	1
32	C200 4826	Pump Rubber	1
33	C222 4710	Pump Spring - 21 Mm	1
34	C526 4633	Spacer (A4)	1
35	C522 2435	Screw - M3 (A4)	2

Index No.	Part No.	Description	Q'ty Per Assembly
100	0951 4006Z	Philips Screw With Flat Washer - M4	
101	0313 0040Z	Philips Pan Head Screw - M3x4	
102	0960 4006Z	Philips Frang Screw - M4x6	
103	0951 4020Z	Philips Screw With Flat Washer - M4	
104	0623 0080E	Spring Pin - 3x8mm	
105	0707 4160B	Bushing - 4x16mm	
106	0574 0050E	Hexagon Headless Set Screw - M4x5	
107	0434 0060Z	Pan Head Self-tapping Screw - M4x6	
108	0720 0060Z	Retaining Ring - M6	
109	0951 4010Z	Philips Screw With Flat Washer M4x10	
110	0720 0050Z	Retaining Ring - M5	
111	0434 0080Z	Pan Head Self-tapping Screw - M4x8	
112	0595 0080Z	Bolt - M5x8	
113	0314 0060Z	Philips Pan Head Screw - M4x6	

21.DRUM SECTION 2 (C228)

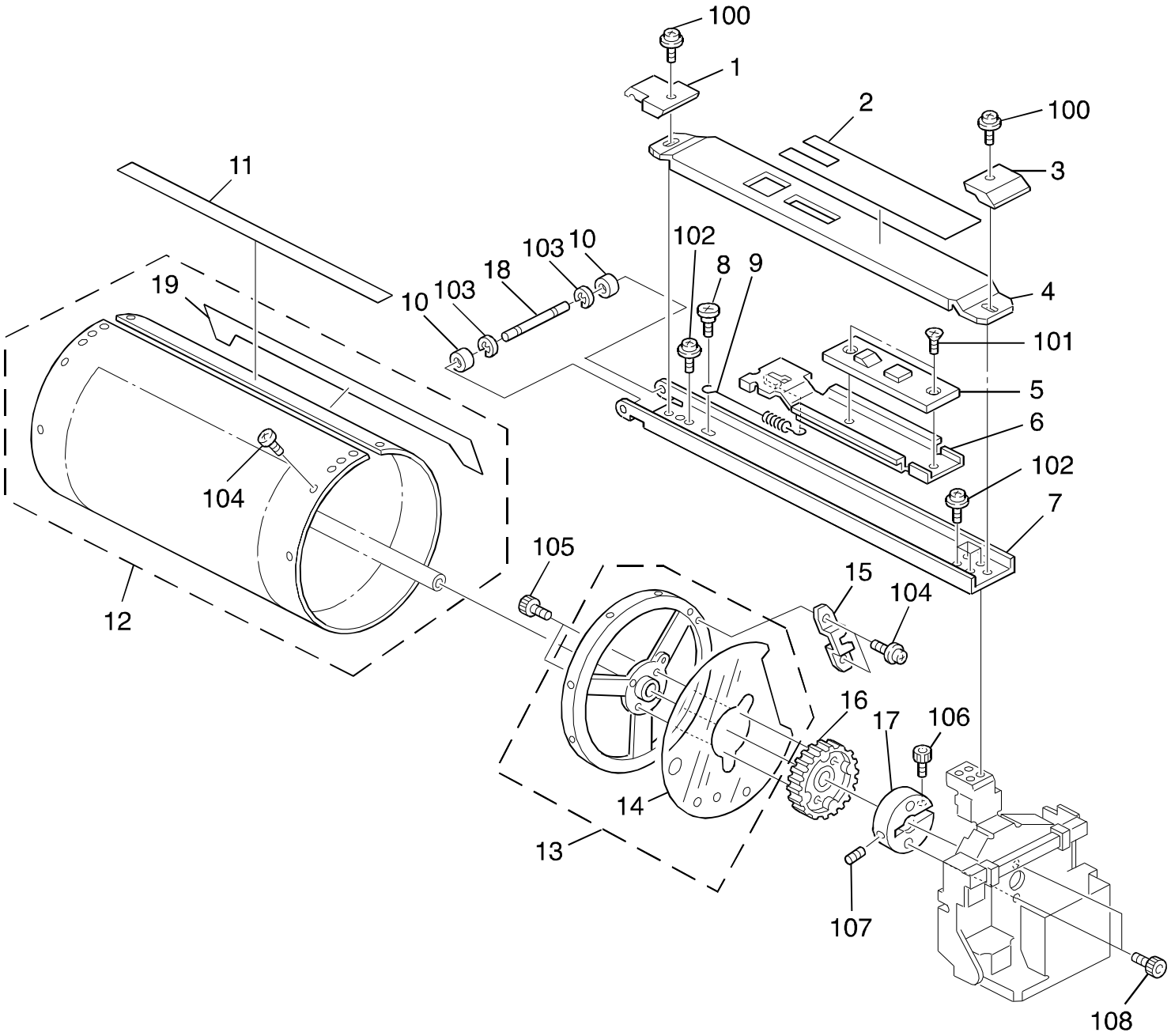


21.DRUM SECTION 2 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C209 4616	Side Plate Cover - Drum	1
2	C209 4620	Upper Cover - Drum Side Plate	1
3	C209 4566	Drum Lock Shaft	1
4	C200 5118	Release Spring	1
5	C209 4567	Left Arm - Drum Lock	1
6	C209 8234	Drum Lock Solenoid	1
7	C209 4568	Solenoid Bracket - Drum Lock	1
8	5054 0536	Magnet Catch Ass'y	1
9	C209 4624	Front Side Plate	1
10	C209 4617	Lower Cover - Drum Side Plate	1
11	C209 4634	Drum Lock Spring - Left	1
12	C200 4631	Left Arm - Drum Lock	1
13	C200 4633	Drum Lock Shaft - Long	2
14	C200 4635	Drum Lock Spring - Right	1
15	C200 4632	Right Arm - Drum Lock	1
16	5600 1379	Spring	1
17	5400 3404	Stepped Screw	2
18	C209 4639	Release Lever - Drum Lock	1
19	C209 4637	Right Stopper - Drum Lock	1
20	C200 4638	Drum Lock Shaft - Small	2
21	C209 4638	Left Stopper - Drum Lock	1
22	C209 4642	Drum Lock Spring	1
23	C201 4636	Drum Unit Handle	1

Index No.	Part No.	Description	Q'ty Per Assembly
100	0434 0060Z	Pan Head Self-tapping Screw - M4x6	
101	0951 3005Z	Philips Pan Head Screw - M3x5	
102	0960 4006Z	Philips Frang Screw - M4x6	
103	0434 0100Z	Pan Head Self-tapping Screw - M4x10	
104	0623 0080E	Spring Pin - 3x8mm	
105	0314 0060Z	Philips Pan Head Screw - M4x6	
106	0720 0060Z	Retaining Ring - M6	
107	0960 4008Z	Flange Head Screw - 4x8	

22.DRUM SECTION 3 (C228)

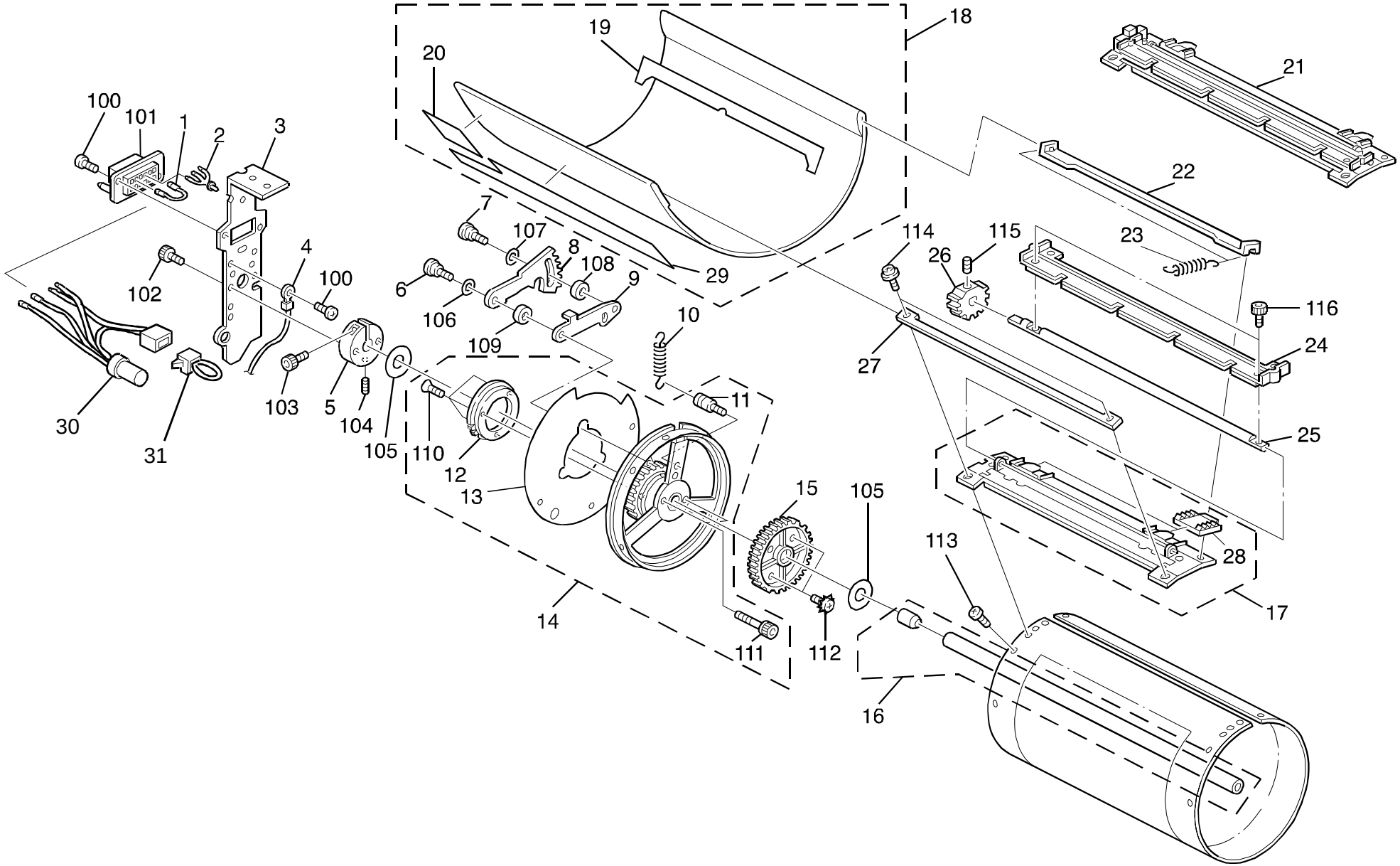


22.DRUM SECTION 3 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C218 4612	Rear Roller Guide	1
2	C201 2543	Decal - Drum Caution	1
3	C207 4611	Front Stopper Guide	1
4	C201 4613	Drum Rail Cover	1
5	C201 4609	Stopper Relasing Lever	1
6	C201 4606	Stopper Releasing Plate	1
7	C200 4625	Drum Rail	1
8	5506 6111	Stepped Screw - M4	1
9	C201 4610	Drum Slider Spring	1
10	C201 4604	Drum Rail Roller	2
11	2701 0101	Metal Screen Seal	1
12	C223 4801	Metal Screen - DLT	1
12	C528 4817	Metal Screen (A4)	1
13	C219 4648	Front Drum Flange	1
14	C219 4678	Front Drum Flange Cover	1
15	C209 4681	Stopper Plate	1
16	C209 4673	Gear - 62Z	1
17	C200 4653	Drum Shaft Bracket	1
18	C200 4627	Drum Rail Shaft	1
19	C209 4814	Metal Screen Mylar	1

Index No.	Part No.	Description	Q'ty Per Assembly
100	0951 4008Z	Philips Screw With Flat Washer M4x8	
101	0323 0050Z	Philips Sunken Head Screw - M3x5	
102	0960 4006Z	Philips Frang Screw - M4x6	
103	0720 0050Z	Retaining Ring - M5	
104	0951 4006Z	Philips Screw With Flat Washer - M4	
105	0595 0080E	Hexagon Bolt - M5x8	
106	0595 0140E	Hexagon Bolt - M5x14	
107	0575 0080E	Hexagon Headless Set Screw - M5x8	
108	0594 0080Z	Bolt - M4x8	

23.DRUM SECTION 4 (C228)

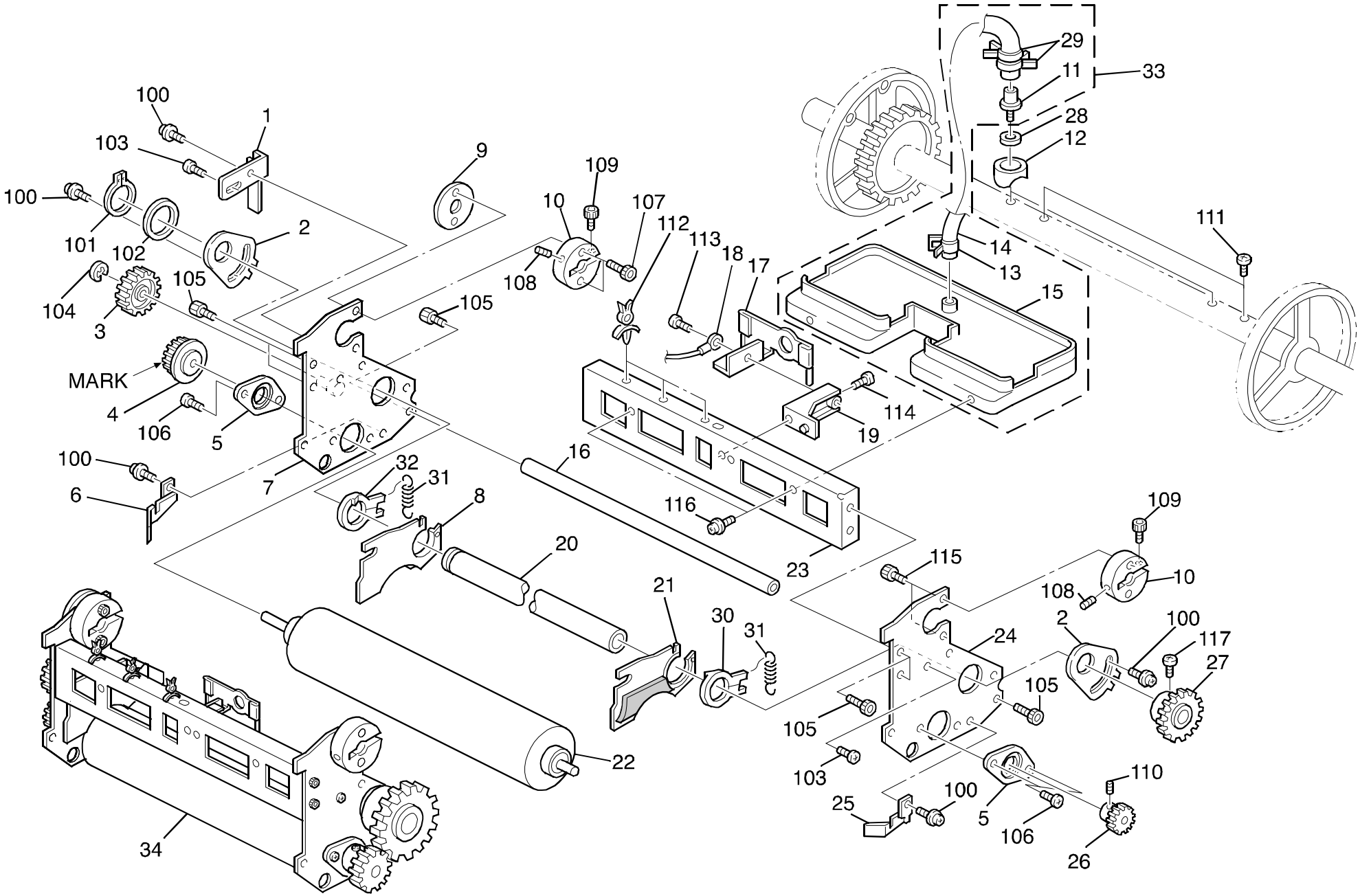


23.DRUM SECTION 4 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C209 8169	Short Harness	1
2	C526 8172	Relay Harness (Option Drum	1
3	C209 4613	Rear Side Plate - Drum	1
4	C209 8140	Grounding Wiar - 65mm	1
5	C200 4653	Drum Shaft Bracket	1
6	5506 6069	Step Screw - Etching Middle Roller	1
7	C200 4946	Clamper Secter Shaft	1
8	C200 4944	Sector Gear - 9t	1
9	C209 4689	Interrupter Plate	1
10	C200 4945	Sector Gear Spring	1
11	5413 2274	Spring Anchor - Release Lever	1
12	C209 4688	Gear Support Plate	1
13	C219 4679	Rear Shield - Drum Flange	1
14	C218 4565	Rear Drum Flange (DLT)	1
14	C559 4900	Rear Drum Flange (A4)	1
15	C209 4672	Gear - 50Z	1
16	C209 4531	Drum Shaft	1
17	C218 4945	Drum Clamper Base Ass'y	1
18	C223 4836	Cloth Screen (DLT)	1
18	C528 4851	Cloth Screen (A4)	1
19	C209 4850	Screen Myler	1
20	C209 4550	Black Seal - 40x50	1
21	C218 4936	Drum Clamper Ass'y	1
22	C218 4683	Screen Rear Plate (DLT)	1
22	C209 4683	Screen Rear Plate (A4)	1
23	C209 4540	Screen Plate Spring (DLT)	2
23	C527 4549	Screen Plate Spring (A4)	2
24	C209 4938	Clamper Magnet	1
25	C209 4941	Clamper Shaft	1
26	C200 4942	Pinion - 9t	1
27	C209 4682	Screen Front Plate	1
28	C209 4947	Clamper Rubber	2
29	C223 4840	Master Stopper-300x3.5	1
30	C528 8172	Relay Harness (A4)	1
31	C528 8173	Short Connector Color Indication (A4)	1

Index No.	Part No.	Description	Q'ty Per Assembly
100	0314 0080Z	Philips Screw - 4x8	
101	1102 2098	Connector - 12P	
102	0594 0080Z	Bolt - M4x8	
103	0595 0140E	Hexagon Bolt - M5x14	
104	0575 0080E	Hexagon Headless Set Screw - M5x8	
105	0807 7114	Washer - 16x24x0.3mm	
106	0807 5044	Spacer - 8.1mm x 11.5mm x 0.2	
107	0807 4126	Flat Washer - 6.2x12x0.2mm	
108	0807 3103	Washer - 4x13x2.3mm	
109	0807 5076	Washer - 8x13x2.2mm	
110	0323 0060Z	Philips Sunk Screw - M3x6	
111	0804 6092	Hexagonal Set Screw	
112	0952 4008W	Philips Screw - M4x8	
113	0951 4006Z	Philips Screw With Flat Washer - M4	
114	0951 4008Z	Philips Screw With Flat Washer M4x8	
115	0574 0050E	Hexagon Headless Set Screw - M4x5	
116	0804 6091	Hexagonal Set Screw - M2x5	

24.DRUM SECTION 5 (C228)

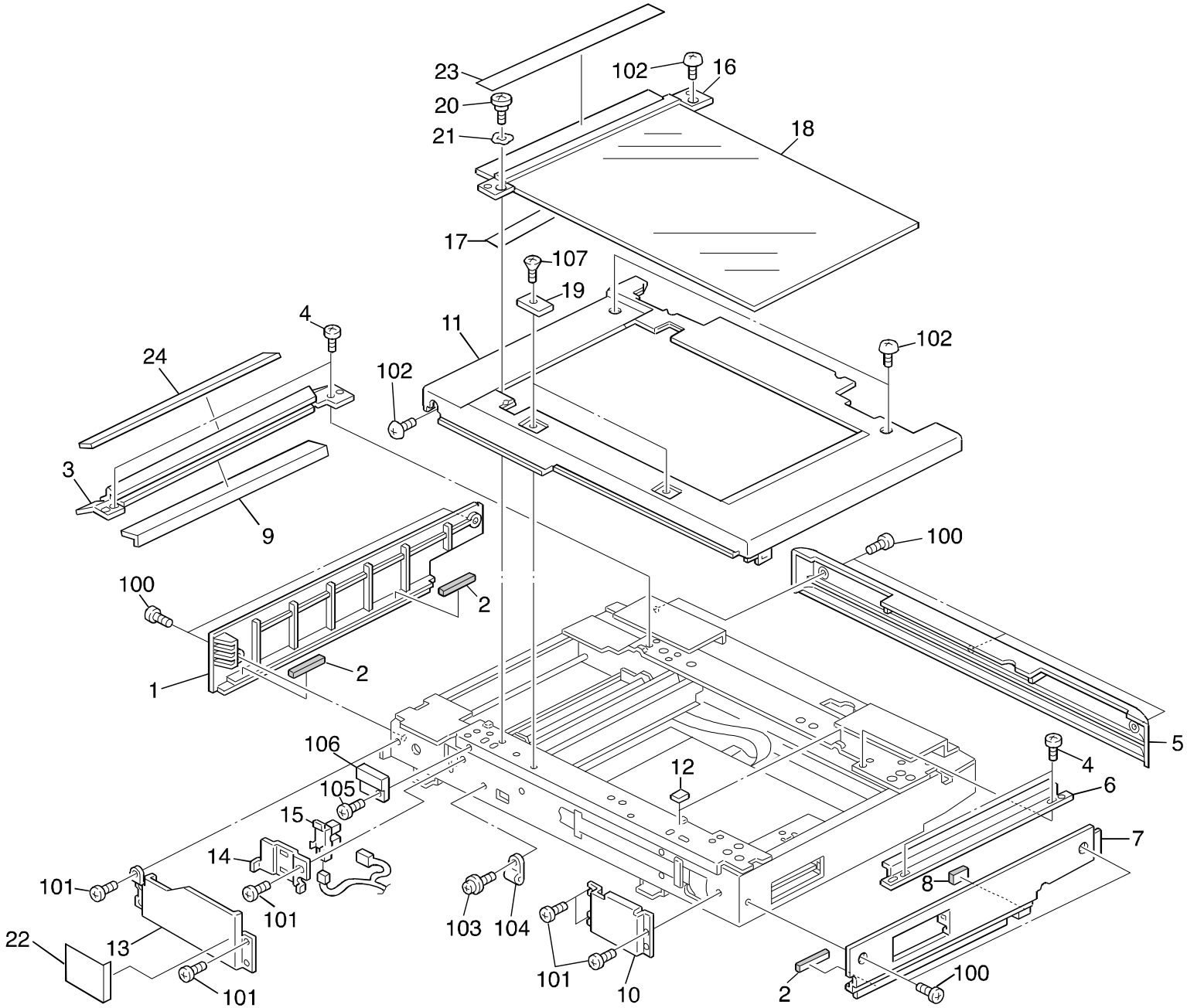


24.DRUM SECTION 5 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C209 4749	Grounding Plate	1
2	C200 4723	Adjusting Plate - Doctor Roller	2
3	C207 4672	Gear - 36Z	1
4	C207 4670	Gear - 24Z	1
5	C201 4665	Bearing Holder	2
6	C217 4599	Rear Drum Blade	1
7	C209 4662	Rear Side Plate - Ink Roller	1
8	C218 4594	Rear Bank Plate	1
9	C209 4654	Spacer - 16x36x5.7	1
10	C200 4653	Drum Shaft Bracket	2
11	C218 4701	Ink Tube Nipple	1
12	C209 4704	Packing - Ink Tube	1
13	C209 4711	Hose Band	1
14	C218 4703	Ink Tube	1
15	C209 4705	Ink Distributor	1
16	C209 4715	Shaft Stay - Ink Roller	1
17	C203 4543	Ink Detector	1
18	C209 8137	Relay Harness - Ink Detection	1
19	C200 4733	Ink Detector Bracket	1
20	C209 4722	Doctor Roller	1
21	C218 4592	Front Bank Plate	1
22	C209 4666	Ink Roller	1
23	C209 4664	Ink Roller Stay	1
24	C209 4661	Front Side Plate - Ink Roller	1
25	C217 4598	Front Drum Blade	1
26	C200 3629	Gear - 20T	1
27	C200 4748	Gear - 45T	1
28	C209 4712	Spacer	1
29	C209 4713	Hose Band	1
30	C218 4558	Front Doctor Roller Ring	1
31	C218 4560	Ring Spring	2
32	C218 4559	Rear Doctor Roller Ring	1
33	C218 4698	Ink Distributor & Tube Ass'y	1
34	C218 4546	Ink Supply Roller Ass'y	1

Index No.	Part No.	Description	Q'ty Per Assembly
100	0951 4006Z	Philips Screw With Flat Washer - M4	
101	0725 0160E	Retaining Ring C - M16	
102	0807 7114	Washer - 16x24x0.3mm	
103	0314 0080Z	Philips Screw - 4x8	
104	0720 0050Z	Retaining Ring - M5	
105	0594 0060E	Socket Screw - 4X6	
106	0313 0040Z	Philips Pan Head Screw - M3x4	
107	0594 0200E	Hexagon Bolt - M4x20	
108	0575 0080E	Hexagon Headless Set Screw - M5x8	
109	0595 0140E	Hexagon Bolt - M5x14	
110	0573 0040E	Hexagon Headless Set Screw - M3x4	
111	0314 0120Z	Philips Screw - 4x12	
112	1105 0209	Clamp	
113	0434 0082Z	Tapping Screw - M4x8	
114	0314 0060Z	Philips Pan Head Screw - M4x6	
115	0594 0080E	Bolt - M4x8	
116	0951 4008Z	Philips Screw With Flat Washer M4x8	
117	0313 0050Z	Philips Screw - 3x5	

25.SCANNER SECTION 1 (C228)

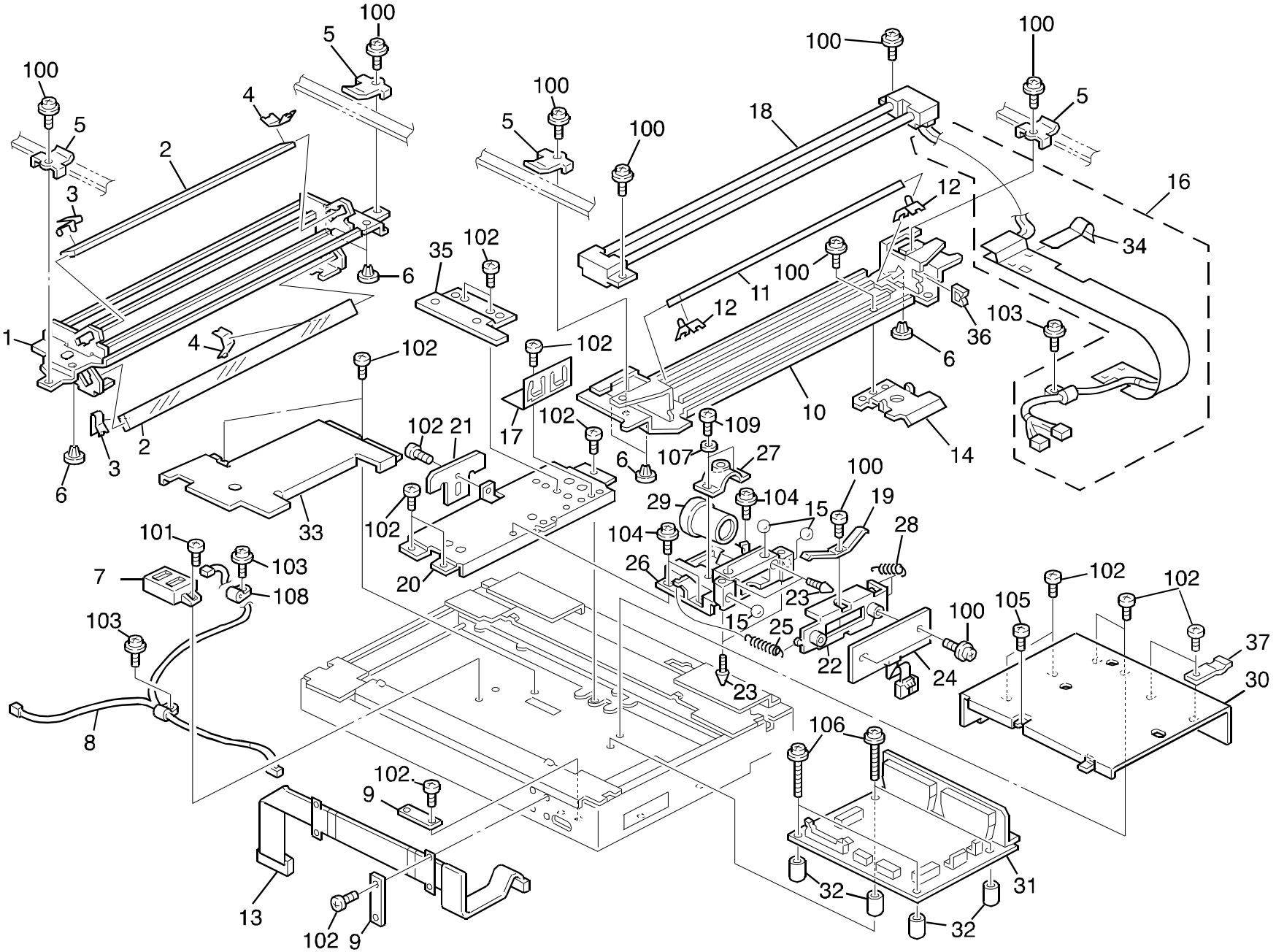


25.SCANNER SECTION 1 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C218 2535	Scanner Left Cover	1
2	C218 2522	Cushion - Large	3
3	C218 3046	Original Exit Guide	1
4	5875 2088	Shoulder Screw - M4	4
5	C218 2560	Scanner Rear Cover	1
6	C218 3041	Right Bracket	1
7	C218 2515	Scanner Right Cover	1
8	C218 2524	Cushion - Small	1
9	C218 3045	Guide Mylar	1
10	C218 3037	Flat Cable Cover	1
11	C218 2500	Scanner Upper Cover	1
12	C218 3171	Seal - 5x30	2
13	C218 3036	H.p Sensor Cover	1
14	C218 3034	H.p Sensor Bracket	1
15	C218 8407	Photointerruptor - GP1A34LC	1
16	C218 3205	Original Scale - A4	1
16	C218 3157	Original Scale - LT	1
17	C222 3170	Exposure Glass Sheet	1
18	C218 3166	Exposure Glass (A4)	1
18	C218 3154	Exposuer Glass (LT)	1
19	C218 3446	Magnet Catch Plate	2
20	C218 2525	Stepped Screw - M4	1
21	C217 5102	Spring Washer	1
22	C218 3018	Seal - 40x131	1
23	C218 2516	Decal - Original Scale - A4	1
23	C218 2820	Decal - Original Size - LT	1
24	C218 3044	Cover Cushion	1

Index No.	Part No.	Description	Q'ty Per Assembly
100	0344 0060D	Philips Truss Head Screw - M4x6	
101	0314 0060Z	Philips Pan Head Screw - M4x6	
102	0344 0060D	Philips Truss Head Screw - M4x6	
103	0960 4006Z	Philips Frang Screw - M4x6	
104	1105 0005	Nylon Clamp - 3n	
105	0313 0060Z	Philips Pan Head Screw - M3x6	
106	1204 2353	Switch - PS3670-02	
107	0324 0060Z	Philips Sunken Head Screw - M4x6	

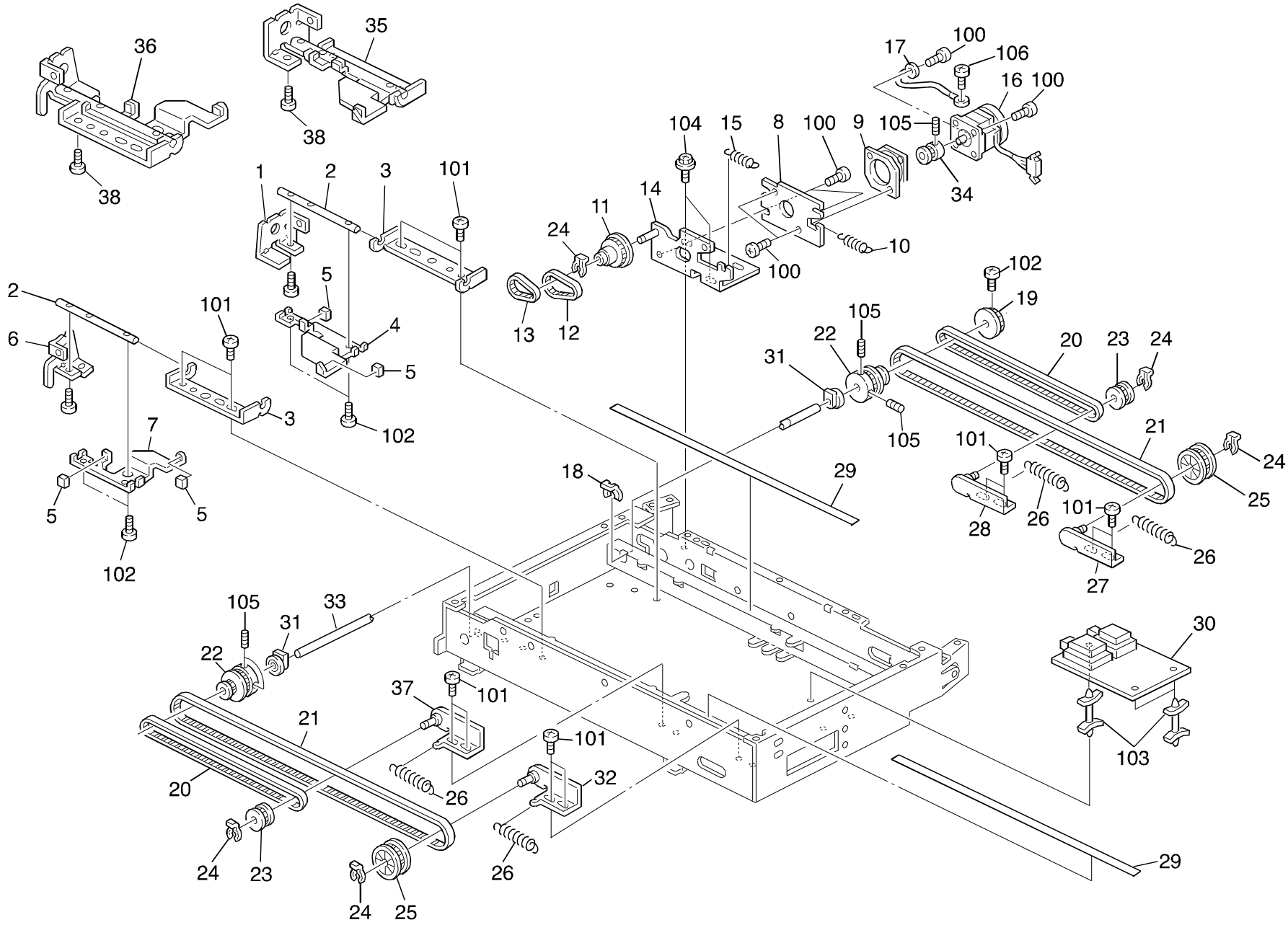
26.SCANNER SECTION 2 (C228)



26.SCANNER SECTION 2 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C222 3185	Mirror Bracket - 2nd/3rd	1
2	C218 3206	2nd And 3rd Mirror	2
3	C218 3208	Front Spring Plate	2
4	C218 3207	Rear Spring Plate	2
5	C218 3193	Timing Belt Clamp	3
6	C222 3175	Scanner Slider	6
7	C218 8424	Original Sensor	1
8	C218 8132	Original Sensor Harness	1
9	C218 3039	Flat Cable Clamp	2
10	C222 3150	1st Mirror Bracket	1
11	C218 3191	1st Mirror	1
12	C218 3190	Spring Plate	2
13	C218 8153	Scanner Flat Cable	1
14	C222 3178	Fluorescent Lamp Harness Bracket	1
15	C218 3213	Adjusting Ball	3
16	C222 3200	Fluorescent Lamp Harness	1
17	C222 3169	Harness Bracket	1
18	C222 8220	Fluorescent Lamp	1
19	C218 3223	Adjusting Spring Plate	1
20	C218 3043	Lens Base Plate	1
21	C218 3226	Shading Plate	1
22	C223 3215	CCD Bracket	1
23	C218 3212	Adjusting Pin	4
24	C223 8072	CCD Board	1
25	C218 3225	Front Adjust Spring	1
26	C218 3214	Lens Bracket	1
27	C218 3211	Lens Holder	1
28	C218 3224	Rear Adjust Spring	1
29	AC02 0046	CCD Lens F4/43	1
30	C222 3232	CCD Board Cover	1
31	C222 8012	A/D Converter Board	1
32	C222 3120	Spacer	4
33	C222 3019	Scanner Harness Cover	1
34	C222 3179	Harness Clip	1
35	C223 3233	CCD Board Bracket	1
36	H515 3709	Edgeing	1
37	C222 3234	Grounding Plate	1
100	0951 3006Z	Philips Screw With Flat Washer - M3x6	
101	0313 0060Z	Philips Pan Head Screw - M3x6	
102	0314 0060Z	Philips Pan Head Screw - M4x6	
103	0960 4006Z	Philips Frang Screw - M4x6	
104	0951 4008Z	Philips Screw With Flat Washer M4x8	
105	0801 1004	Screw - M4X4	
106	0965 3008W	Tapping Screw With Flat Washer-m3x8	
107	0701 0030Z	Flat Washer - M3	
108	1105 0005	Nylon Clamp - 3n	
109	0965 3008W	Tapping Screw With Flat Washer - M3x8	

27.SCANNER SECTION 3 (C228)

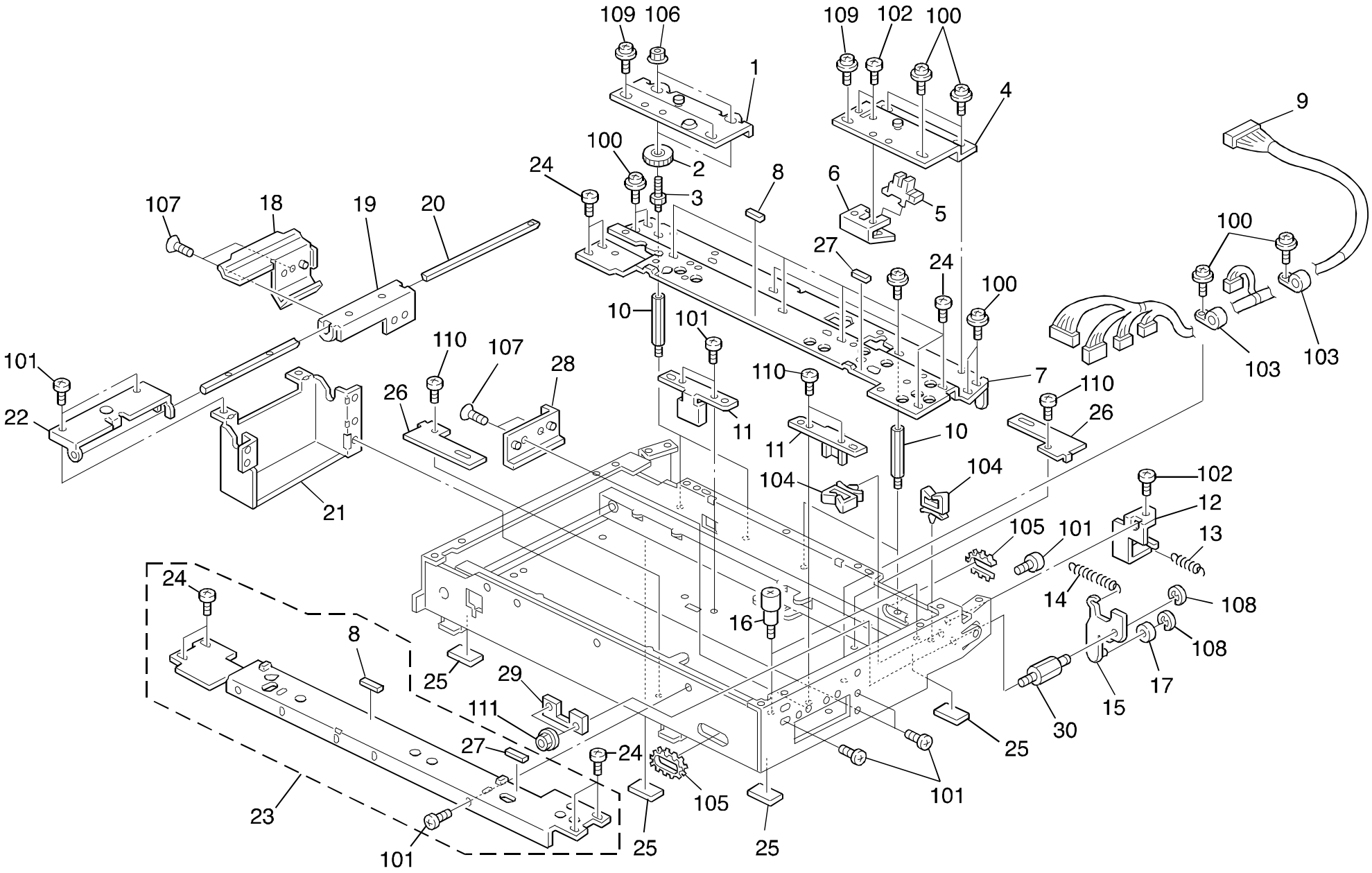


27.SCANNER SECTION 3 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C218 3060	Rear Fixed Angle	1
2	C218 3057	Fixed Shaft	2
3	C218 3056	Fixed Shaft Bracket	2
4	C218 3053	Arm - Carriage - Fix - Front	1
5	C218 3054	Pad - 5x5	4
6	C218 3055	Front Fixed Angle	1
7	C218 3059	Rear Fixed Arm	1
8	C218 3081	Tension Bracket	1
9	C218 3086	Motor Cushion	1
10	C218 3082	Tension Spring	1
11	C228 3065	Timing Pulley	1
12	C218 3072	Timing Belt - B40S2M160	1
13	C218 3073	Timing Belt - B60S2M126	1
14	C218 3078	Scanner Motor Bracket	1
15	C218 3083	Tension Spring	1
16	C223 8214	Stepping Motor	1
17	C218 8426	Grounding Harness	1
18	C209 3133	Retaining Ring - M6	1
19	C228 3063	Timing Pulley	1
20	C218 3075	Timing Belt - B40S2M800	2
21	C218 3074	Timing Belt - B40S2M1274	2
22	C218 3063	Scanner Drive Pulley	2
23	C218 3069	Timing Pulley - 24Z	2
24	5447 2681	Snap Ring	5
25	C218 3068	Timing Pulley - 48Z	2
26	C218 3094	Tension Spring	4
27	C218 3103	Timing Pulley Bracket - Rear 2	1
28	C218 3096	Timing Pulley Bracket - Rear 1	1
29	C218 3017	Scanner Grip Rail	2
30	C222 8221	Inverter	1
31	C222 3193	Bushing - 8mm	1
32	C218 3099	Timing Pulley Bracket - Front 2	1
33	C218 3090	Scanner Drive Shaft	1
34	C228 3062	Timing Pulley	1
35	C218 3053	Arm - Carriage - Fix - Front	1

Index No.	Part No.	Description	Q'ty Per Assembly
36	C218 3059	Rear Fixed Arm	1
37	C218 3091	Timing Pulley Bracket - Front 1	1
38	C218 3051	Philips Screw - M3	1
100	0314 0080Z	Philips Screw - 4x8	
101	0801 1004	Screw - M4X4	
102	0313 0050Z	Philips Screw - 3x5	
103	1105 0225	Spacer - W Rocking	
104	0804 6074	Hexagon Bolt - M4x8	
105	0573 0040E	Hexagon Headless Set Screw - M3x4	
106	0964 4006Z	Tapping Screw W/flat Washer -m4x6	

28.SCANNER SECTION 4 (C228)

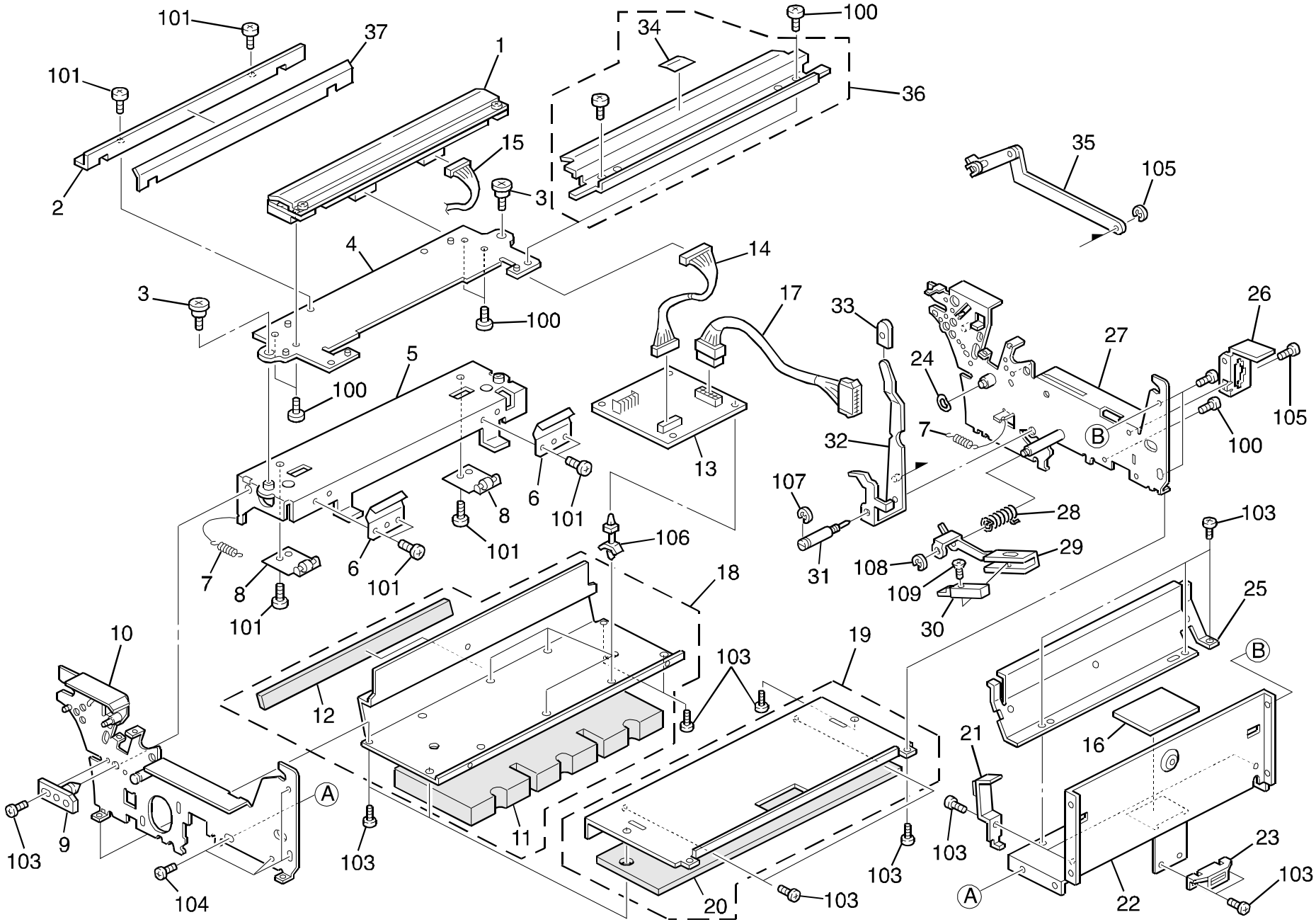


28.SCANNER SECTION 4 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
*	C228 3259	Scanner Ass'y	1
1	C218 3438	Platen Cover Left Bracket	1
2	C218 3430	Knob Screw	2
3	C218 3431	Platen Cover Shaft	2
4	C218 3426	Platen Cover Right Bracket	1
5	AW02 0021	Photointerruptor - 175487-3	1
6	C218 3434	Sensor Bracket	1
7	C223 3027	Scanner Rear Stay	1
8	C218 3025	Contact Grass Cushion	2
9	C222 8415	Scanner Harness	1
10	C218 3031	Stud	4
11	C223 3014	Scanner Stopper Lever	2
12	C218 3118	Scanner Stopper Bracket	1
13	C218 3117	Stopper Spring 2	1
14	C218 3116	Stopper Spring 1	1
15	C218 3112	Scanner Stopper	1
16	C218 3020	Stopper Pin	2
17	C209 4087	Gide Plate Roller	1
18	C223 3108	Scanner Open Grip	1
19	C223 3109	Grip Bracket	1
20	C218 3111	Scanner Grip Shaft	1
21	C222 3016	Scanner Grip Cover	1
22	C218 3110	Scanner Grip Upper Cover	1
23	C223 3023	Scanner Front Stay	1
24	5875 2088	Shoulder Screw - M4	11
25	C218 3003	Seal - 28x40	4
26	C222 3235	Grounding Plate	2
27	C223 3024	Contact Glass Sheet	2
28	C223 3119	Scanner Open Cover	1
29	C218 3021	Support Plate	1
30	C218 3022	Scanner Stopper Shaft	1

Index No.	Part No.	Description	Q'ty Per Assembly
100	0960 4008Z	Flange Head Screw - 4 X 8	
101	0314 0060Z	Philips Pan Head Screw - M4x6	
102	0313 0060Z	Philips Pan Head Screw - M3x6	
103	1105 0011	Nylon Clamp - 8n	
104	1105 0144	Harness Clamp	
105	1106 0103	Universal Bushing	
106	0713 0040B	Hexagon Nut - M4	
107	0324 0060Z	Philips Sunken Head Screw - M4x6	
108	0720 0030Z	Retaining Ring - M3	
109	0960 4008W	Philips Flange Screw - M4x8	
110	0801 1004	Screw - M4X4	
111	0713 0050B	Hexagon Nut - M5	

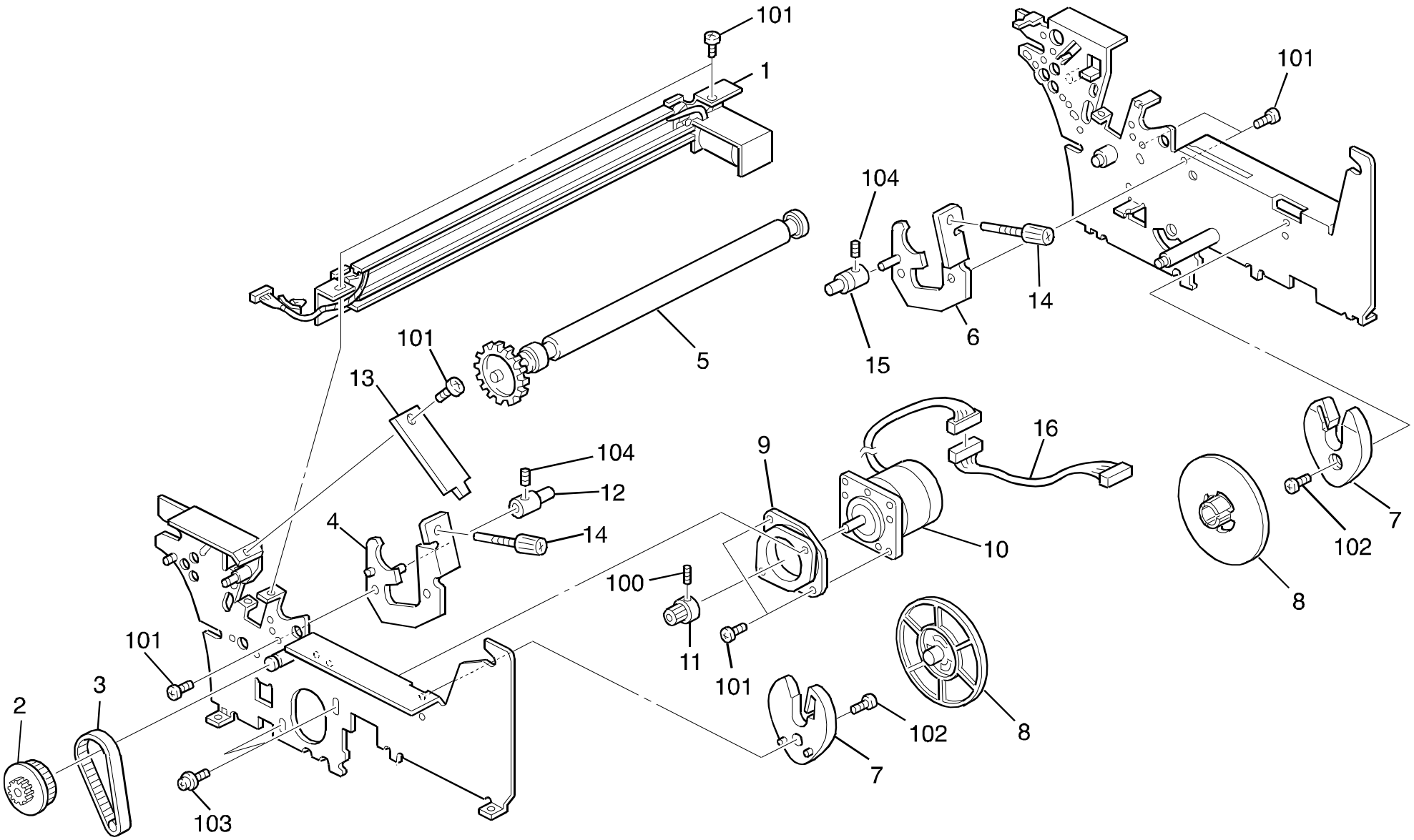
29.PLOTTER SECTION 1 (C228)



29.PLOTTER SECTION 1 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
*	C228 1009	Imaging Unit Ass'y	1
1	C228 8037	Thermal Head - A3	1
2	C228 4392	Front Bracket - Thermal Head	1
3	C209 4180	Thermal Head Spacer	2
4	C228 4039	Spacer:thermal Head	1
5	C228 4030	Stay:thermal Head:ass'y	1
6	C209 4139	Spring Plate	2
7	C228 4034	Spring:thermal Head	2
8	C218 4136	Spring Plate	2
9	C223 4040	Left Adjusting Plate	1
10	C228 4002	Plotter Left Side Plate	1
11	C223 2599	Plotter Base Pad - Large	1
12	C209 2585	Plotter Base Pad - Small	1
13	C228 8301	DC/DC Converter	1
14	C228 8164	Thermal Head Harness - 2	1
15	C228 8163	Thermal Head Harness - 1	1
16	C219 4023	Seal	1
17	C219 8146	Harness Head Power	1
18	C223 4133	Plotter Base	1
19	C223 2586	Lower Plotter Cover	1
20	C223 2587	Plotter Cover Pad	1
21	C203 4013	Brake Plate	1
22	C228 4021	Holder Master	1
23	5054 0536	Magnet Catch Ass'y	1
24	C218 4038	Bushing Washer - M8	1
25	C228 4050	Thermal Head Cover	1
26	C218 4126	Right Connector Bracket	1
27	C228 4013	Plotter Right Side Plate	1
28	C200 4116	Sensor Spring	1
29	C209 4027	Master End Sensor Bracket	1
30	5203 5230	Master Sensor	1
31	C209 4063	Lever Shaft	1
32	C218 4060	Platen Release Lever	1
33	C209 4059	Lever Knob	1
34	C218 2827	Decal - Master Feed	1
35	C209 4076	Tension Release Arm	1
36	C228 4054	Thermal Head Cover	1
37	C228 4056	Thermal Head Guide	1
100	0313 0060Z	Philips Pan Head Screw - M3x6	
101	0313 0030Z	Philips Pan Head Screw - M3x3	
102	0313 0030Z	Philips Pan Head Screw - M3x3	
103	0314 0060Z	Philips Pan Head Screw - M4x6	
104	0434 0080Z	Pan Head Self-tapping Screw - M4x8	
105	0434 0060Z	Pan Head Self-tapping Screw - M4x6	
106	1105 0193	Nylon Stud	
107	0720 0070Z	Retaining Ring - M7	
108	0720 0040Z	Retaining Ring - M4	
109	0323 0100Z	Philips Sunken Head Screw - M3x10	

30.PLOTTER SECTION 2 (C228)

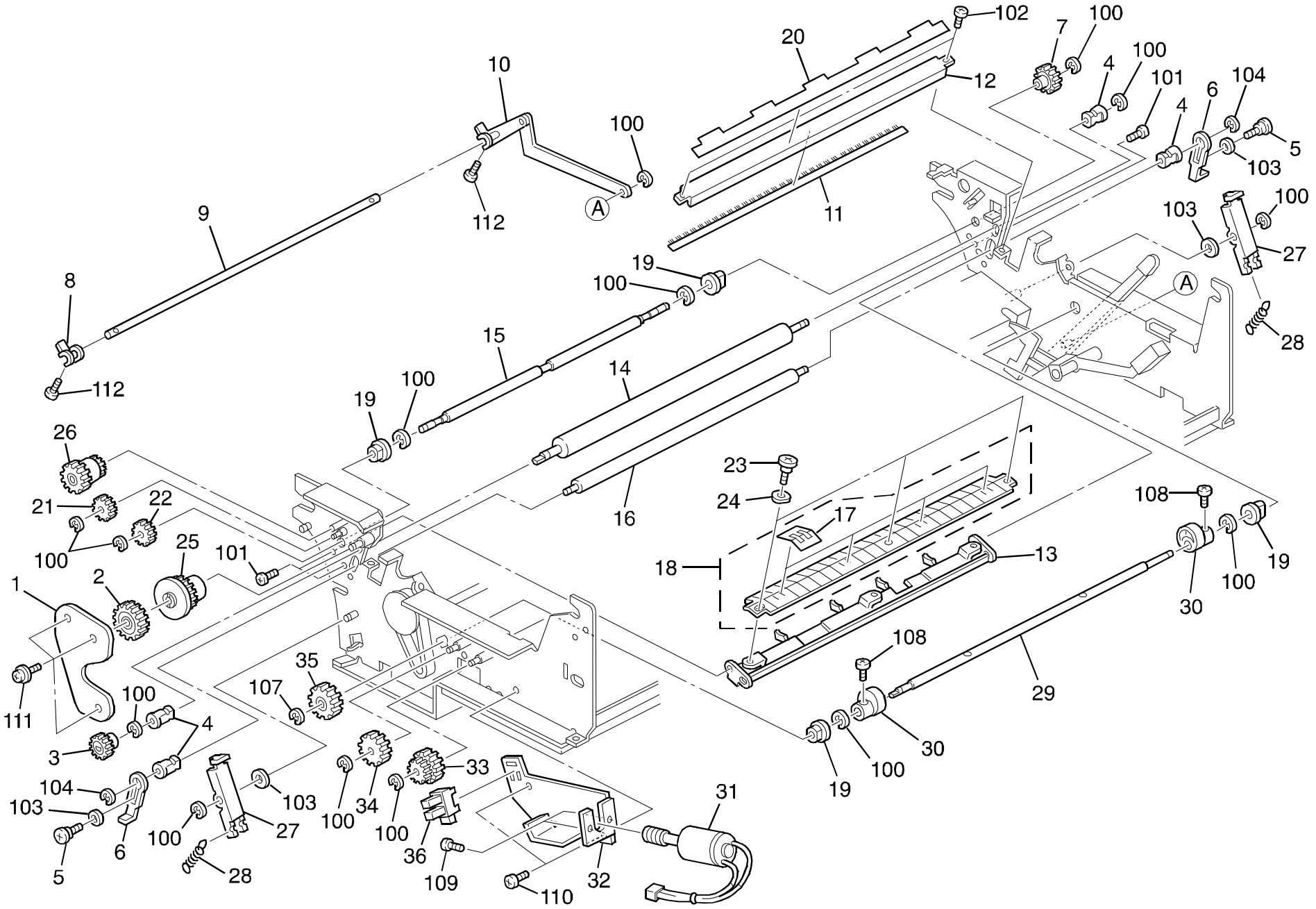


30.PLOTTER SECTION 2 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C228 4065	Cutter Unit	1
2	C228 4111	Pulley - 38	1
3	C228 4112	Timing Belt - B114MXl9.5	1
4	C228 4179	Left Holder - Platen Cover	1
5	C228 4040	Platen Roller	1
6	C228 4184	Right Holder - Platen Cover	1
7	C228 4025	Mater Roller Holder	2
8	C213 4042	Master Roll Flange	2
9	C228 4120	Cushion:motor:plotter	1
10	C222 8216	Stepper Motor - DC2.85V 4.28W	1
11	C219 4071	Gear - 17Z	1
12	C228 4175	Left Positioning Pin - Thermal Head	1
13	C221 4070	Gear Cover	1
14	C207 4150	Fixing Screw	2
15	C228 4176	Right Positioning Pin - Thermal Head	1
16	C228 8129	Motor Relay Harness	1

Index No.	Part No.	Description	Q'ty Per Assembly
100	0574 0040E	Hexagon Headless Set Screw - M4x4	
101	0314 0060Z	Philips Pan Head Screw - M4x6	
102	0434 0080Z	Pan Head Self-tapping Screw - M4x8	
103	0951 4006Z	Philips Screw With Flat Washer - M4	
104	0573 0030E	Hexagon Headless Set Screw - M3x3	

31.PLOTTER SECTION 3 (C228)

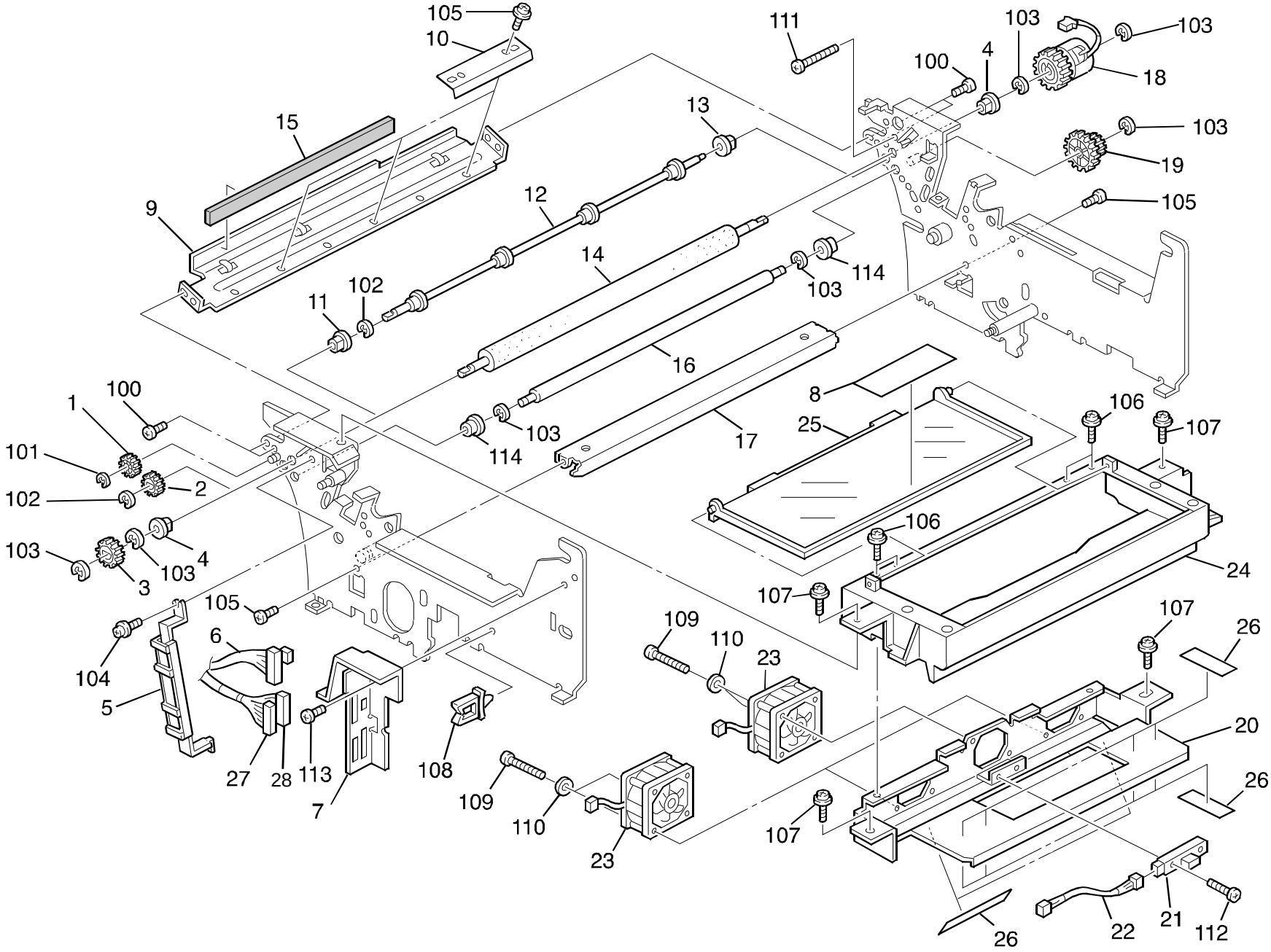


31.PLOTTER SECTION 3 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C228 4118	Supporting Plate:drive Sub-unit:plo	1
2	C228 4116	Gear:middle:plotter	1
3	C228 4069	Gear:roller:tension:plotter	1
4	5056 0188	Bushing - 6mm - Long	4
5	5403 2075	Stepped Screw	2
6	C203 4060	Tension Release Slider	2
7	C209 4072	Gear - 24Z	1
8	C209 4075	Left Arm - Tension Release	1
9	C209 4082	Tension Release Shaft	1
10	C209 4076	Tension Release Arm	1
11	C209 4320	Antistatic Brush	1
12	C223 4068	Front Guide Plate	1
13	C228 4091	Reverse Guide	1
14	C228 4073	Upper Master Feed Roller	1
15	C228 4300	Counter Roller	1
16	C209 4074	Lower Master Feed Roller	1
17	C228 4038	Mater Guide Sheet - Large	4
18	C228 4088	Lower Guide Plate Ass'y	1
19	H012 1181	Bushing- 6mm	2
20	C228 4057	Tension Roller Guide Mylar	1
21	C228 4314	Idle Gear	1
22	C228 4305	Drive Gear	1
23	C218 2525	Stepped Screw - M4	3
24	C217 5102	Spring Washer	3
25	C228 4115	Torque Limiter	1
26	C228 4313	Middle Roller Gear	1
27	C228 4024	Tension Bracket	2
28	C228 4107	Tension Spring	2
29	C228 4083	Pressure Release Shaft	1
30	C228 4080	Pressure Release Cam	2
31	C217 8447	DC Motor - 24V/7.2W	1
32	C228 4085	Motor Bracket	1
33	C228 4082	Worm Wheel	1
34	C228 4081	Idle Gear	1
35	C228 4084	Drive Gear	1

Index No.	Part No.	Description	Q'ty Per Assembly
36	AW02 0021	Photointerruptor - 175487-3	1
100	0720 0040Z	Retaining Ring - M4	
101	0313 0060Z	Philips Pan Head Screw - M3x6	
102	0312 5050Z	Philips Pan Head Screw - M2.5x5	
103	0701 0060Z	Flat Washer - M6	
104	0720 0050Z	Retaining Ring - M5	
106	0720 0040Z	Retaining Ring - M4	
107	0720 0040Z	Retaining Ring - M4	
108	0951 3005Z	Philips Pan Head Screw - M3 X 5	
109	0313 0030Z	Philips Pan Head Screw - M3x3	
110	0314 0060Z	Philips Pan Head Screw - M4x6	
111	0960 3006Z	Philips Flange Screw - M3x6	
112	0313 0050Z	Philips Screw - 3x5	

32.PLOTTER SECTION 4 (C228)

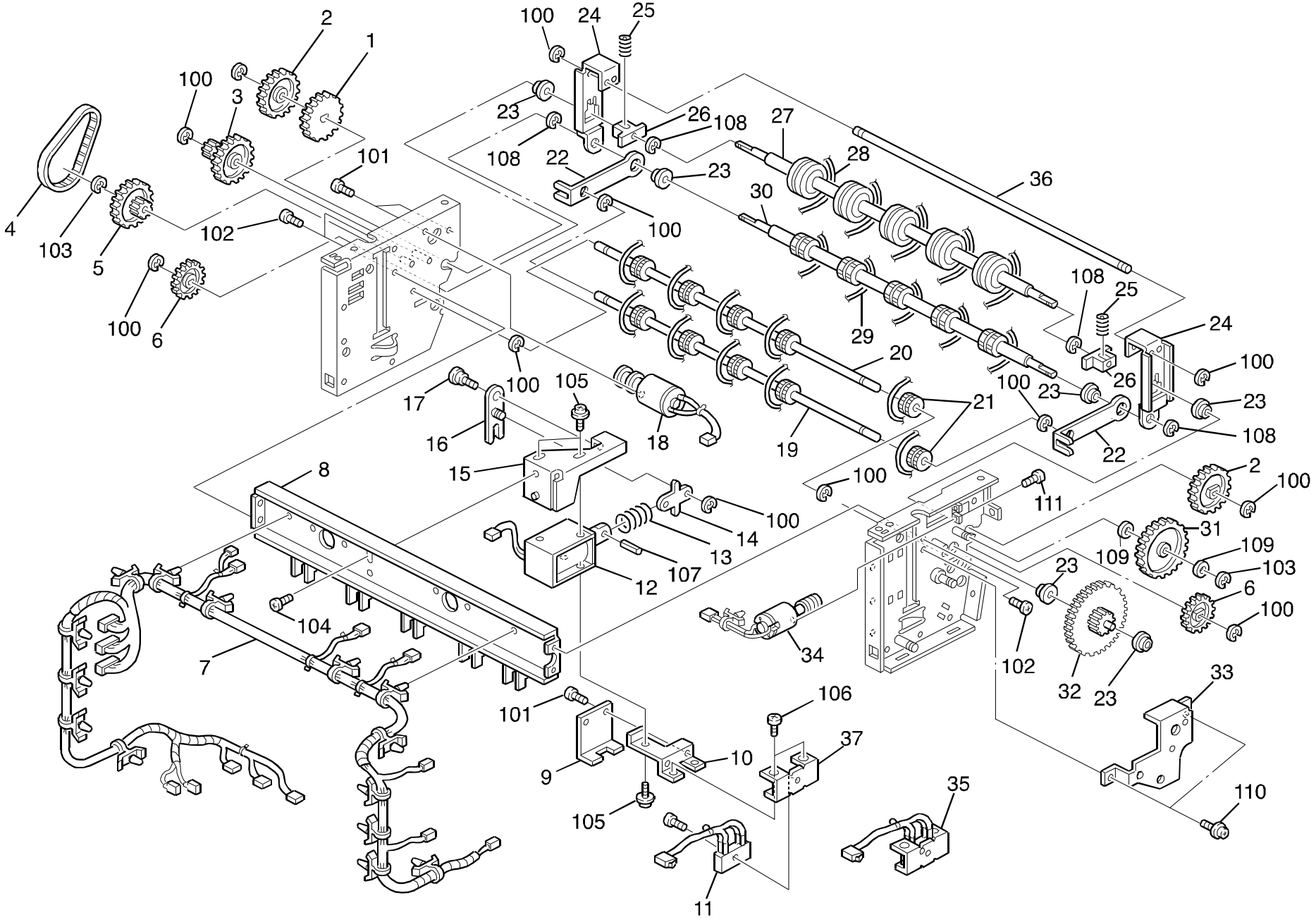


32.PLOTTER SECTION 4 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C200 2338	Gear - 20T	1
2	C209 4305	Gear - 16Z	1
3	C209 4303	Gear -27z	1
4	5053 0447	Bushing - 6mm	2
5	C209 4128	Harness Bracket	1
6	C228 8128	Imaging Unit Harness	1
7	C228 4125	Left Connector Bracket	1
8	C222 2553	Caution Decal - Master Set	1
9	C228 4306	Invertor Guide Stay	1
10	C228 4311	Reverse Guide Plate	1
11	5324 1658	Bushing- 4x8x4.5mm	1
12	C209 4300	Counter Roller	1
13	H002 2226	Bushing	1
14	C228 4100	Upper Reverse Roller	1
15	C228 4309	Vacuum Fan Pad	1
15	H012 1181	Bushing- 6mm	1
16	C228 4105	Lower Reverse Roller	1
17	C209 4019	Plotter Middle Stay	1
18	C209 8239	Reverse Roller - Magnetic Clutch	1
19	C209 4114	Gear - 20/27Z	1
20	C228 4340	Duct Support Plate	1
21	C203 8137	Master Sensor	1
22	C222 8129	Sensor Relay Harness	1
23	C222 8208	Air Knife Motor	1
24	C223 4311	Duct Stay	1
25	C222 4336	Duct Cover	1
26	C228 4338	Shield Mylar	2
27	C228 8129	Thermal Head Drive Harness	1
28	C228 8163	Thermal Head Harness	1

Index No.	Part No.	Description	Q'ty Per Assembly
100	0313 0060Z	Philips Pan Head Screw - M3x6	
101	0720 0020Z	Retaining Ring - M2	
102	0720 0025Z	Retaining Ring - M2.5	
103	0720 0040Z	Retaining Ring - M4	
104	0964 4008Z	Tapping Screw W/washer - M4x8	
105	0313 0050Z	Philips Screw - 3x5	
106	0951 3008Z	Philips Screw With Flat Washer - M3x8	
107	0951 4006Z	Philips Screw With Flat Washer - M4	
108	1105 0413	Harness Clamp	
109	0313 0350Z	Pan Head Screw - M3x35	
110	0701 0030Z	Flat Washer - M3	
111	0313 0140Z	Philips Pan Head Screw - M3x14	
112	0313 0080Z	Philips Screw - 3x8	
113	0434 0060Z	Pan Head Self-tapping Screw - M4x6	
114	0741 3706	Ball Bearing - 6x10x3	

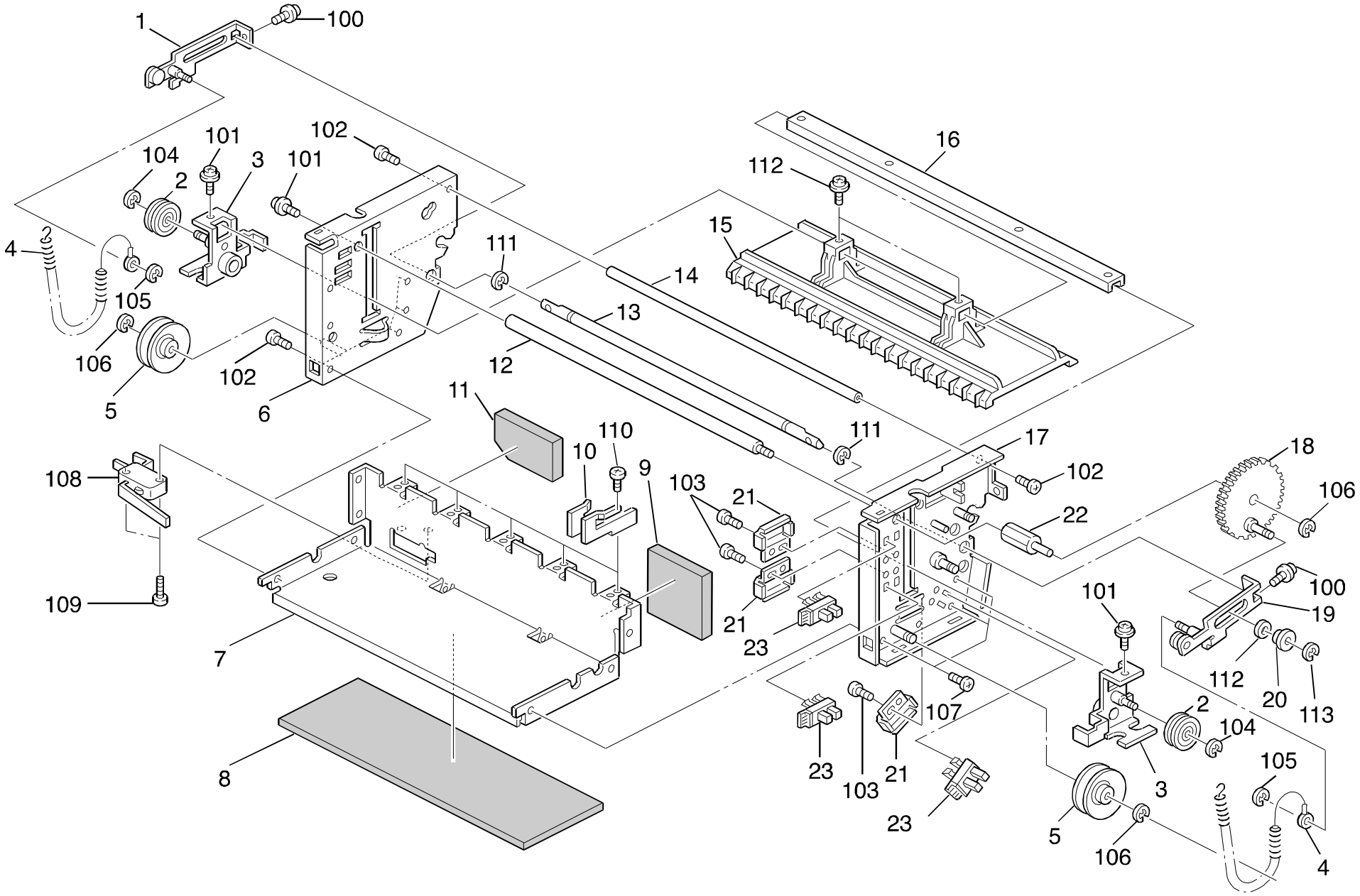
33.MASTER EJECT SECTION 1 (C228)



33.MASTER EJECT SECTION 1 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
*	C228 1011	Master Eject Unit	1
1	C209 3545	Gear - 62Z	1
2	C200 3627	Gear - 30T	2
3	C200 3606	Coupled Gear - 62t & 20t	1
4	C207 3612	Timing Belt - B30S2M126	1
5	C207 3604	Pulley - 40Z	1
6	C200 3628	Gear - 20T	2
7	C223 8122	Master Exit Harness	1
8	C209 3516	Master Eject Stay	1
9	C209 3530	Sensor Cover - Master Eject	1
10	C209 3529	Sensor Bracket - Master Eject	1
11	C209 8117	Drum Master Detection Sensor	1
12	C224 8452	Master Eject Solenoid	1
13	C207 6125	Guide Plate Spring	1
14	C209 3661	Solenoid Plate	1
15	C200 3553	Solenoid Bracket	1
16	C200 3554	Solenoid Arm	1
17	5403 2075	Stepped Screw	1
18	C209 8260	Micro Motor - Master Eject	1
19	C201 3529	Lower Pulley Shaft	1
20	C207 3530	Upper Pulley Shaft	1
21	C200 3547	Pulley	10
22	C200 3529	Pulley Plate	2
23	5506 4608	Bushing - Paper Hold/down Roller -	6
24	C221 3519	Roller Arm	2
25	C201 3527	Pressure Spring	2
26	C209 3520	Separation Roller Bushing	2
27	C209 3522	1st Upper Eject Roller	1
28	C219 3605	Upper Belt	5
29	C219 3606	Lower Belt	5
30	C228 3524	1st Lower Eject Roller	1
31	C209 3550	Worm Gear - 16/50z	1
32	C209 3551	Gear - 16/116Z	1
33	C209 3557	Bracket	1
34	C217 8447	DC Motor - 24V/7.2W	1
35	C209 3561	Master Eject Sensor	1
36	C209 3521	Arm Connecting Shaft	1
37	C213 3561	Master Eject Sensor Bracket	1
100	0720 0040Z	Retaining Ring - M4	
101	0313 0030Z	Philips Pan Head Screw - M3x3	
102	0434 0060Z	Pan Head Self-tapping Screw - M4x6	
103	0720 0030Z	Retaining Ring - M3	
104	0314 0050Z	Philips Pan Head Screw - M4x5	
105	0951 3006Z	Philips Screw With Flat Washer - M3x6	
106	0313 0050Z	Philips Screw - 3x5	
107	0623 0120E	Spring Pin - 3X12	
108	0720 0050Z	Retaining Ring - M5	
109	0807 3041	Spring Washer	
110	0964 4008Z	Tapping Screw W/washer - M4x8	
111	0313 0030Z	Philips Pan Head Screw - M3x3	

34.MASTER EJECT SECTION 2 (C228)

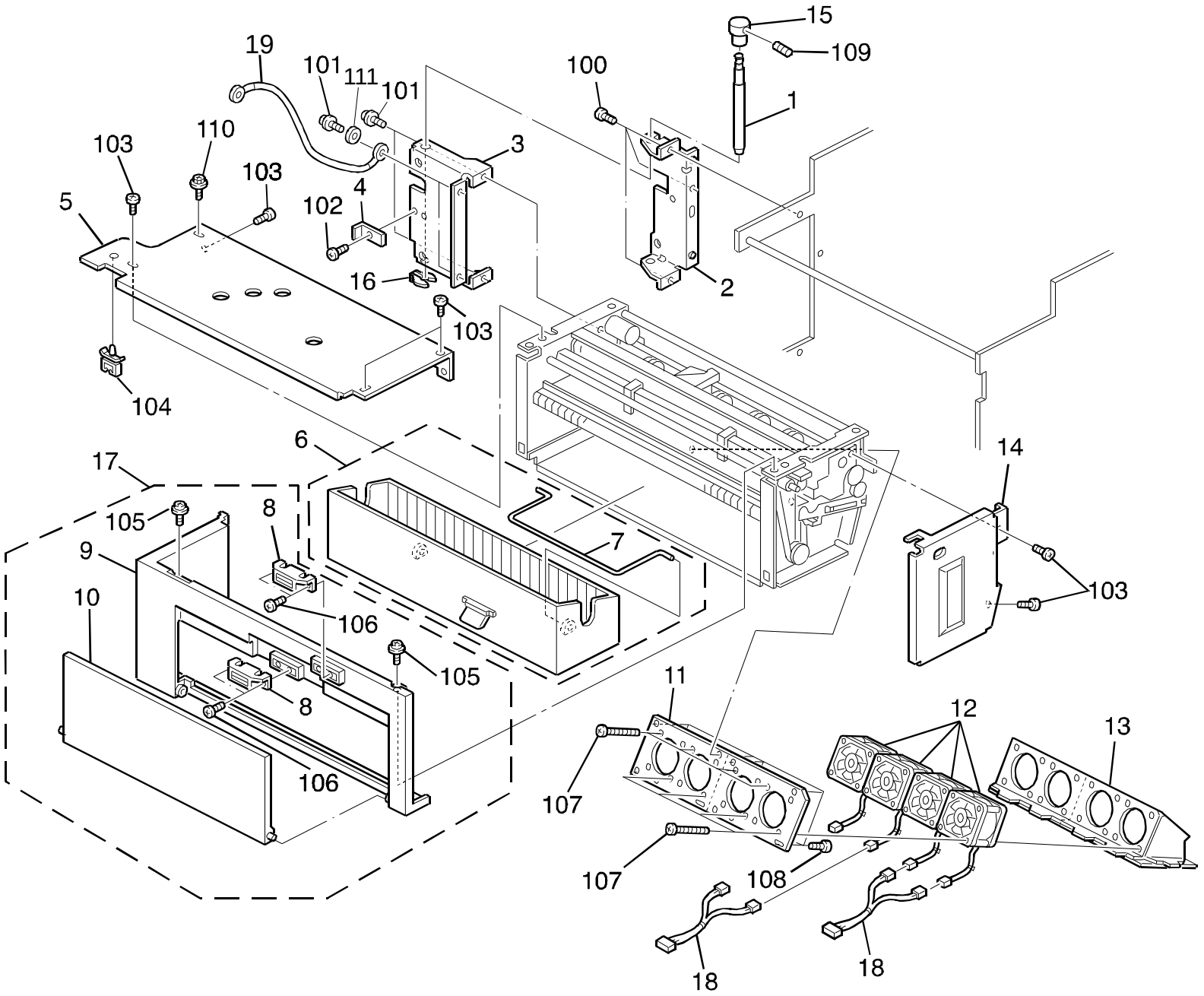


34.MASTER EJECT SECTION 2 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C209 3543	Rear Pressure Arm	1
2	C209 3536	Pulley	2
3	C227 3533	Pressure Plate Arm	2
4	C221 3537	Pressure Spring	2
5	C200 3712	Pulley	2
6	C209 3512	Rear Side Plate	1
7	C209 3526	Bottom Plate - Master Eject Box	1
8	C209 2579	Lower Pad - Master Eject Box	1
9	C209 2581	Left Pad - Master Eject Box	1
10	C218 3532	Pulley Guide	5
11	C209 2580	Right Pad - Master Eject Box	1
12	C209 3642	Master Eject Stay - Large	1
13	C209 3539	Pressure Arm Shaft	1
14	C200 3508	Master Eject Stay - Small	1
15	C209 3531	Pressure Plate	1
16	C209 3532	Pressure Plate Shaft	1
17	C209 3501	Front Side Plate	1
18	C209 3554	Gear - 60Z	1
19	C209 3540	Front Pressure Arm	1
20	C209 3615	Spacer - 6x12x3	1
21	C209 3507	Master Eject Sensor Cover	3
22	C209 3643	Lock Stay	1
23	AW02 0075	Photointerrupter	3

Index No.	Part No.	Description	Q'ty Per Assembly
100	0964 4010Z	Tapping Screw W/Washer - M4x10	
101	0960 4005Z	Philips Flange Screw - M4x5	
102	0314 0080Z	Philips Screw - 4x8	
103	0433 0060W	Tapping Screw - M3x6	
104	0720 0040Z	Retaining Ring - M4	
105	0720 0030Z	Retaining Ring - M3	
106	0720 0060Z	Retaining Ring - M6	
107	0434 0060Z	Pan Head Self-tapping Screw - M4x6	
108	1204 1490	Micro Switch - V-53-1A3	
109	0313 0140Z	Philips Pan Head Screw - M3x14	
110	0314 0060Z	Philips Pan Head Screw - M4x6	
111	0720 0080Z	Retaining Ring - M8	
112	0807 4118	Flat Washer	
113	0720 0050Z	Retaining Ring - M5	

35.MASTER EJECT SECTION 3 (C228)

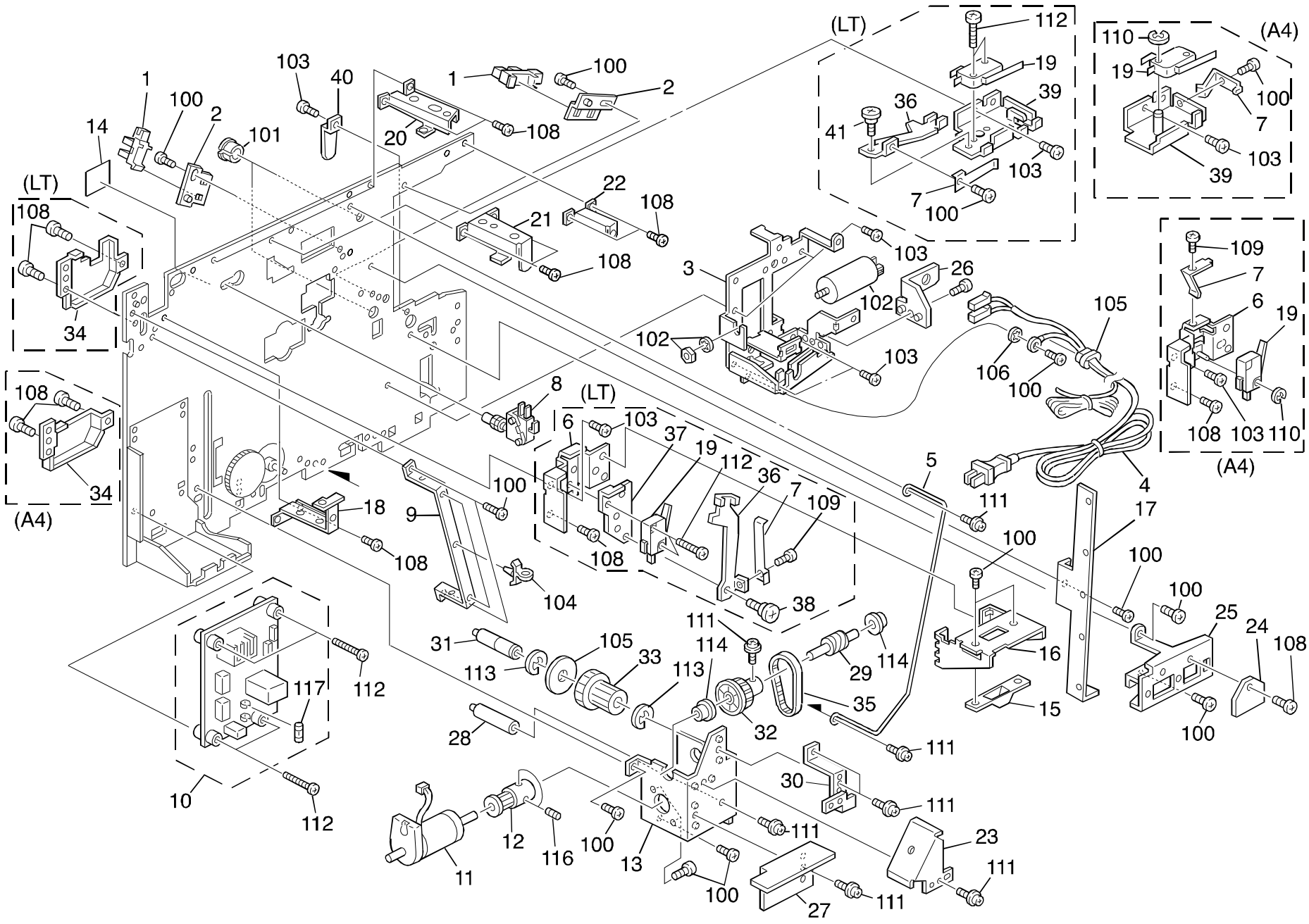


35.MASTER EJECT SECTION 3 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C218 3505	Hinge Shaft	1
2	C209 3671	Master Eject Hinge	1
3	C219 3680	Master Eject Hinge - Small	1
4	C209 3675	Cover Bracket	1
5	C219 3768	Upper Inner Cover	1
6	C209 3558	Master Eject Box	1
7	C203 3511	Arm - Master Eject Box	1
8	AG07 0004	Magnetic Catch	2
9	C218 2460	Master Eject Cover	1
10	C218 2455	Master Eject Door	1
11	C228 3574	Blower Fan Bracket	1
12	C222 8208	Air Knife Motor	1
13	C228 3581	Blower Duct	1
14	C219 3673	Inner Cover - Master Eject	1
15	C218 3506	Boss	1
16	C209 3133	Retaining Ring - M6	1
17	C219 2454	Master Eject Cover	1
18	C228 8123	Harness:gate:master Ejection Unit	2
19	C203 8204	Grounding Wire	1

Index No.	Part No.	Description	Q'ty Per Assembly
100	0434 0080Z	Pan Head Self-tapping Screw - M4x8	
101	0964 4010Z	Tapping Screw W/Washer - M4x10	
102	0314 0080Z	Philips Screw - 4x8	
103	0434 0060Z	Pan Head Self-tapping Screw - M4x6	
104	1105 0108	Nylon Clip	
105	0965 3006Z	Tapping Screw With Flat Washer - M3x6	
106	0434 0062W	Pan Head Tapping Screw - M4x6	
107	0313 0350Z	Pan Head Screw - M3x35	
108	0314 0060Z	Philips Pan Head Screw - M4x6	
109	0574 0040E	Hexagon Headless Set Screw - M4x4	
110	0444 0080W	Hexagon Head Tapping Screw - M4x8	
111	0705 0040B	Toothed Washer	

36.ELECTRICAL SECTION 1 (C228)

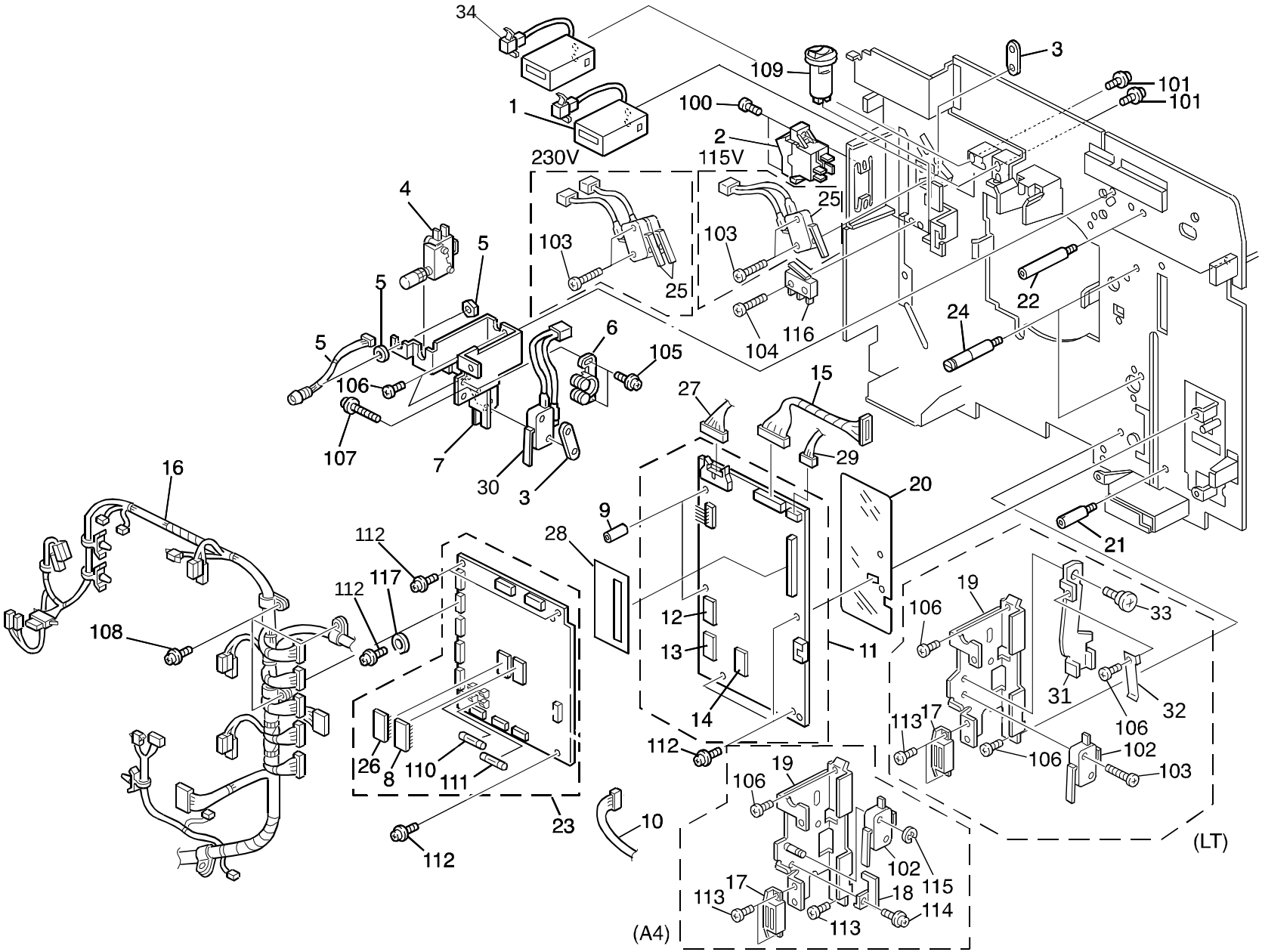


36.ELECTRICAL SECTION 1 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	AW02 0021	Photointerruptor - 175487-3	2
2	C209 2306	Drum Sensor Bracket	2
3	C219 2104	Right Grip - Master Eject	1
4	C218 8252	Power Supply Cord - 230V	1
4	C223 8242	Power Supply Cord - 115V	1
5	C203 8095	Upper Harness Supporter	1
6	C221 2004	Switch Bracket (A4)	1
6	C218 2070	Safety Switch Bracket - LT	1
7	C200 3123	Support Plate - Safety Switch (A4)	1
7	C218 2173	Support Plate - Safety Switch (LT)	1
8	C219 8174	Microswitch	1
9	C209 2169	Harness Bracket	1
10	C223 8064	AC Drive Board - 230V	1
10	C223 8058	AC Drive Board - 120V	1
11	C224 8213	DC Motor	1
12	C223 5097	Worm Wheel	1
13	C223 5093	Lift Motor Bracket	1
14	C203 2759	Master Cutter Decal	1
15	C222 2020	Scanner Stopper	1
16	C218 2015	Rear Scanner Stopper Bracket	1
17	C209 2130	Safety Cover	1
18	C218 2022	Rear Cover Left Bracket	1
19	C219 8296	Safety Switch	1
20	C218 2014	Rear Left Upper Bracket	1
21	C218 2013	Rear Center Upper Bracket	1
22	C218 2012	Rear Right Upper Bracket	1
23	C223 5092	Lifting Gear Cover	1
24	C221 2124	Cap	1
25	C221 2128	Support Bracket	1
26	C221 6115	Delivery Table Bracket	1
27	C223 5090	Motor Bracket	1
28	C223 5091	Gear Shaft	1
29	C223 5095	Worm Wheel	1
30	C223 5098	Support Gear Bracket	1
31	C223 5099	Worm Gear Shaft	1

Index No.	Part No.	Description	Q'ty Per Assembly
32	C223 5126	Timing Pulley	1
33	AB03 0216	Pulley - 15Z	1
34	C218 2072	Safety Switch Cover - LT	1
34	C221 2028	Switch Cover Bracket (A4)	1
35	C218 3073	Timing Belt - B60S2M126	1
36	C218 2172	Safety Switch Lever - LT	2
37	C218 2071	Safety Switch Stopper - LT	1
38	C201 5125	Shoulder Screw - M4	1
39	C218 2171	Safety Switch Bracket - Eject Box (115V)	1
39	C210 2171	Safety Switch Bracket - Eject Box (230V)	1
40	C203 2128	AC Drive Board Cover	1
41	C217 4426	Shoulder Screw	1
100	0314 0080Z	Philips Screw - 4x8	
101	1106 0430	Bushing - 13mm	
102	1602 0991	Noise Filter - 115V	
102	1607 0742	Noise Filter - 230V	
103	0434 0080Z	Pan Head Self-tapping Screw - M4x8	
104	1105 0046	Harness Band	
105	0807 7064	Spacer	
106	0705 0040B	Toothed Washer	
108	0314 0060Z	Philips Pan Head Screw - M4x6	
109	0313 0060Z	Philips Pan Head Screw - M3x6	
110	0720 0020Z	Retaining Ring - M2	
111	0960 4008Z	Flange Head Screw - 4 X 8	
112	0314 0160Z	Philips Pan Head Screw - M4x16	
113	0720 0120Z	Retaining Ring - M12	
114	0741 3706	Ball Bearing - 6x10x3	
116	0574 0040E	Hexagon Headless Set Screw - M4x4	
117	1107 0354	Fuse - 3.15a 125v	

37.ELECTRICAL SECTION 2 (C228)

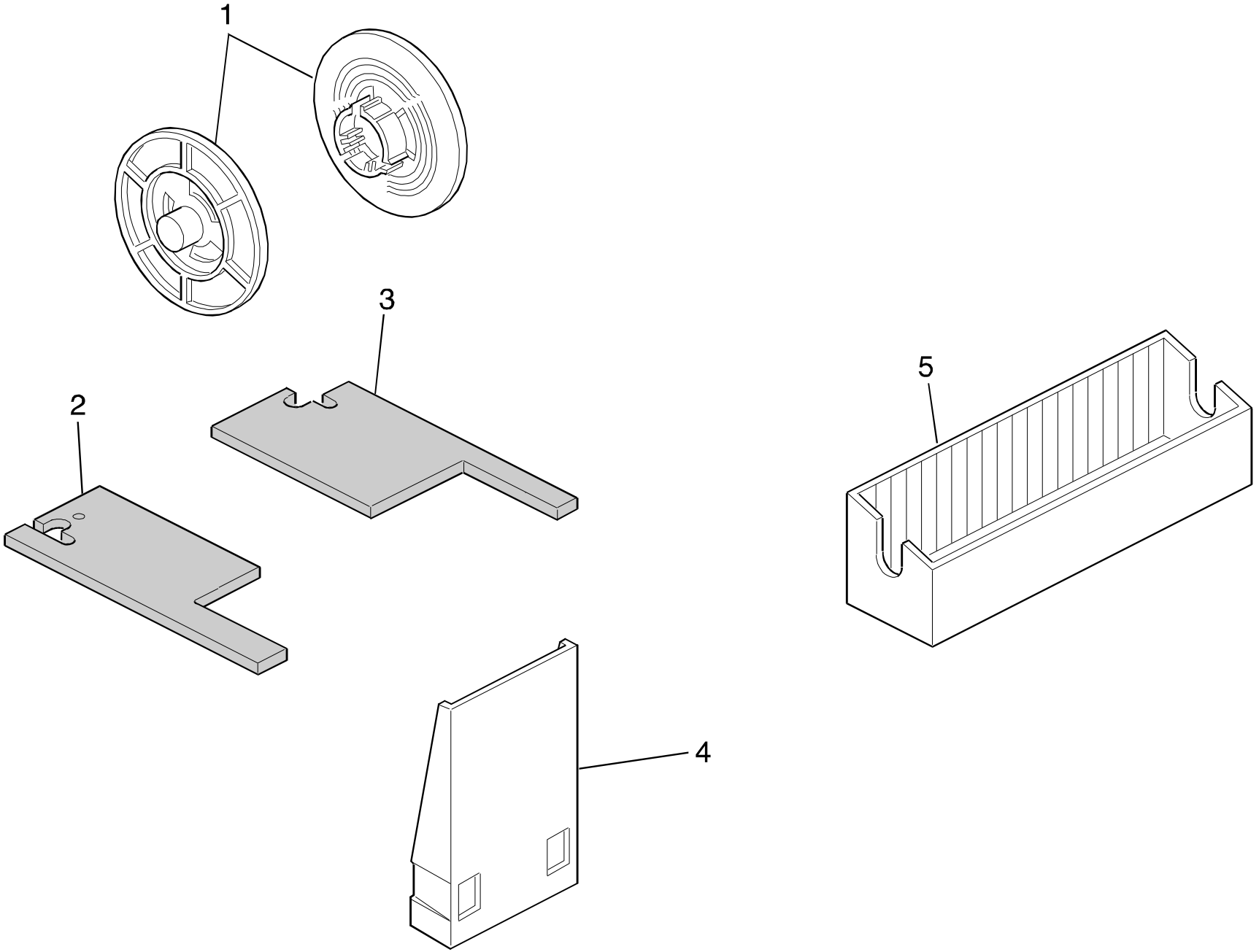


37.ELECTRICAL SECTION 2 (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C200 8446	Copy Counter	1
2	C209 8276	Main Switch	1
3	5056 0509	Nut Plate - Microswitch	2
4	C219 8171	Microswitch	1
5	C209 8278	LED - DRUM	1
6	C209 2469	Door Catch	1
7	C219 2418	Push Switch Bracket	1
8	C228 8045	UVEPROM - IC123 - 512K X8 150NS	1
9	C218 2051	Main Board Spacer	2
10	C228 8127	Plotter Unit Harness	1
11	C228 8001	Image Processing Board	1
12	C228 8005	UVEPROM - IC435 - 256K X8 150NS	1
13	C223 8006	UVEPROM - IC440 - 256K X8 150NS	1
14	C228 8004	UVEPROM - IC438 - 256K X8 150NS	1
15	C228 8157	Thermal Head Harness	1
16	C228 8208	DC Drive Harness (230V)	1
16	C228 8113	DC Drive Harness (115V)	1
17	AG07 0004	Magnetic Catch	1
18	C200 3755	Plate Spring	1
19	C219 2419	Safety Switch Bracket	1
20	C218 5094	Insulating Sheet	1
21	C200 2596	Maim Board Stud - Long	1
22	C218 2052	Stud - Main Control Board	1
23	C228 8042	Main Control Board	1
24	C223 2054	IPU Board Stud	2
26	C228 8047	UVEPROM - IC124 - 512K X8 - 150NS	1
27	C218 8153	Scanner Flat Cable	1
28	C228 5094	Insulating Sheet	1
29	C228 8130	Motor Harness	1
30	C219 8296	Safety Switch	1
31	C218 2172	Safety Switch Lever - LT	1
32	C218 2173	Support Plate - Safety Switch - LT	1
33	C218 2185	Stepper Screw	1
34	C200 8443	Master Counter (NRG)	1

Index No.	Part No.	Description	Q'ty Per Assembly
100	0313 0060Z	Philips Pan Head Screw - M3x6	
101	0951 3004Z	Philips Screw With Flat Washer - M3x4	
102	1204 1442	Micro Switch - V-152-3A5(10E)	
103	0313 0140Z	Philips Pan Head Screw - M3x14	
104	0800 0084	Philips Pan Head Screw - M2.3x12	
105	0951 3012Z	Philips Screw W/h Flat Washer - M3x12	
106	0434 0080Z	Pan Head Self-tapping Screw - M4x8	
107	0960 4010Z	Philips Flange Screw - M4X10	
108	0960 4008Z	Flange Head Screw - 4 X 8	
109	1107 0788	Circuit Breaker - 6A (115V)	
109	1107 0782	Circuit Breaker - 5A (230V)	
110	1107 0413	Fuse (glass Case) - 3A - 125V	
111	1107 0415	Fuse (Glass Case) - 5A - 125V	
112	0951 3006Z	Philips Screw With Flat Washer - M3x6	
113	0314 0080Z	Philips Screw - 4x8	
114	0960 3006B	Philips Flange Screw - M3 X 6	
115	0720 0020Z	Retaining Ring - M2	
116	1204 2239	Micro Switch	
117	0951 3008Z	Philips Screw With Flat Washer - M3x8	

38.ACCSESSORIES (C228)

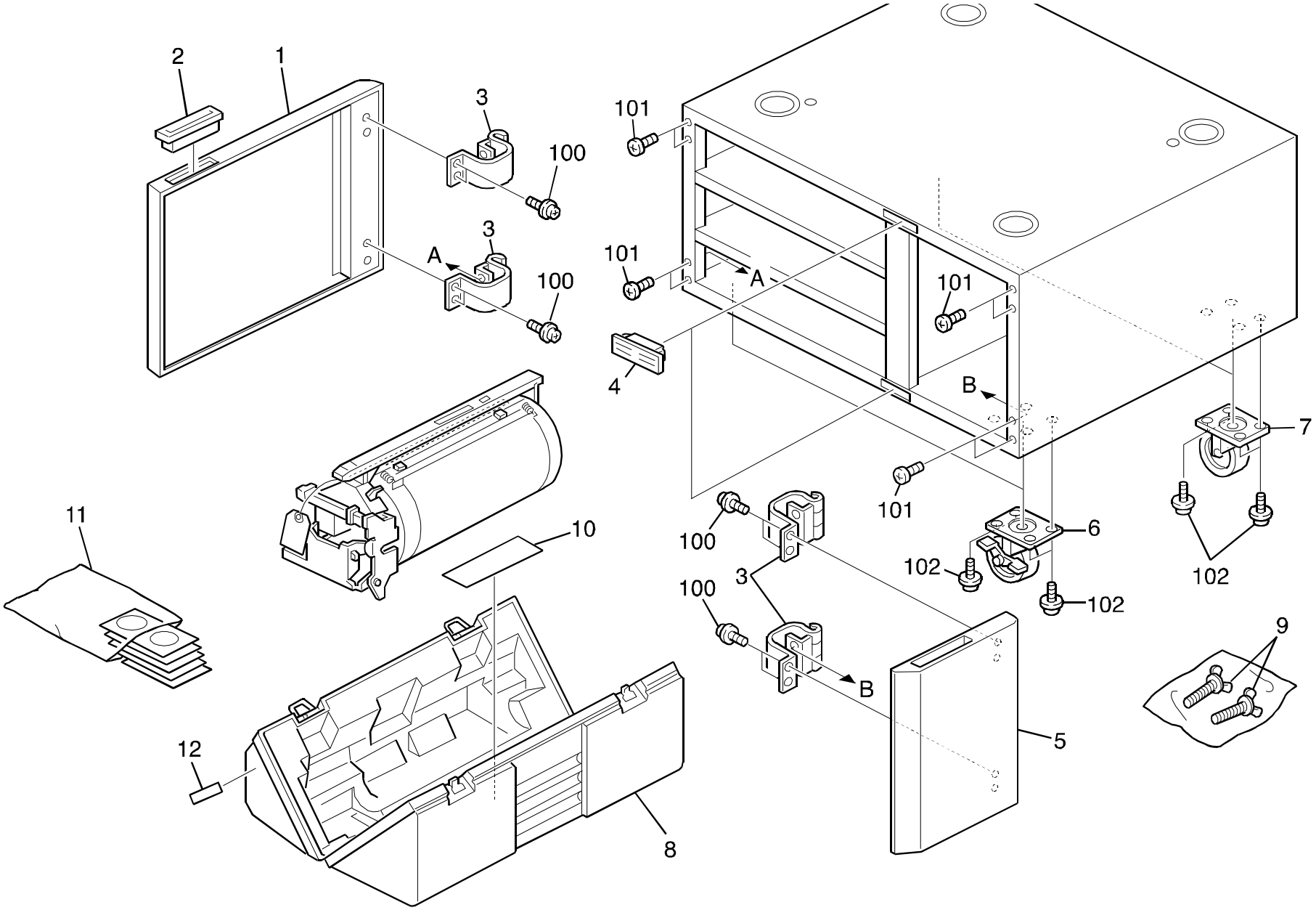


38.ACCSESSORIES (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C213 4042	Master Roll Flange	1
2	C223 2551	Base Pad - Front	1
3	C223 2553	Base Pad - Rear	1
4	C223 6183	End Plate	1
5	C209 3558	Master Eject Box	1

Index No.	Part No.	Description	Q'ty Per Assembly

39.TABLE SECTION (C228)



39.TABLE SECTION (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
1	C546 2020	Left Door	1
2	C546 2030	Door Grip	1
3	C525 2031	Door Hinge	4
4	C525 2032	Door Catch	2
5	C546 2025	Right Door	1
6	C525 2039	Caster Stopper	2
7	C525 2038	Caster	2
8	C526 2200	Option Drum Case	1
9	C546 2035	Adjusting Screw	2
10	C526 2113	Decal - Drum Set	1
11	C526 2151	Drum Decal - Red	1
11	C526 2152	Drum Decal - Blue	1
11	C526 2153	Drum Decal - Green	1
11	C526 2154	Drum Decal - Brown	1
11	C526 2259	Drum Decal - White	1
12	C526 2210	Decal - Drum Case	1

Index No.	Part No.	Description	Q'ty Per Assembly
100	0951 4006B	Philips Screw With Washer - M4x6	
101	0960 3008B	Philips Flange Screw - M3x8	
102	0950 5012B	Philips Screw With Flat Washer - M5x12	

40.IMAGE PROSSETING BOARD (C228)

CAPACITOR

SYMBOL NO.	INDEX NO.
C401	132
C402	135
C403	134
C404	133
C405	137
C406	142
C407	136
C408	143
C409	143
C410	143

SYMBOL NO.	INDEX NO.
C411	143
C412	143
C413	139
C414	142
C415	141
C416	141
C417	139
C418	139
C419	143
C420	143

SYMBOL NO.	INDEX NO.
C421	143
C422	143
C423	144
C424	144
C425	145
C426	143
C427	143
C428	143
C429	143
C430	143

SYMBOL NO.	INDEX NO.
C431	143
C432	143
C433	143
C434	143
C435	143
C436	143
C437	143
C438	143
C439	143
C440	143

SYMBOL NO.	INDEX NO.
C441	139
C442	139
C443	139
C444	139
C445	139
C446	143
C447	139
C448	143
C449	143
C450	143

SYMBOL NO.	INDEX NO.
C451	139
C452	143
C453	143
C454	146
C455	143
C456	141
C457	143
C458	143
C459	143
C460	143

SYMBOL NO.	INDEX NO.
C461	139
C462	143
C463	143
C464	139
C465	143
C466	143
C467	143
C468	143
C469	143
C470	143

SYMBOL NO.	INDEX NO.
C471	143
C472	140
C473	143
C474	143
C475	143
C476	143
C477	143
C478	143
C479	139
C480	140

SYMBOL NO.	INDEX NO.
C481	143
C482	140
C483	143
C484	143
C485	143
C486	140
C487	143
C488	143
C489	138
C490	140

SYMBOL NO.	INDEX NO.
C491	138
C192	139
C493	143
C494	143
C495	143
C496	143
C497	143
C498	143
C499	143
C500	143

SYMBOL NO.	INDEX NO.
C501	143
C502	143
C503	143
C504	143
C505	143
C506	143
C507	143
C508	143
C509	143
C510	143

SYMBOL NO.	INDEX NO.
C511	143
C512	143

CONNECTOR

SYMBOL NO.	INDEX NO.
CN401	190
CN402	190
CN403	191
CN404	182
CN405	190
CN406	182
CN407	191
CN408	191
CN409	191
CN410	190

FILTER

SYMBOL NO.	INDEX NO.
FIL401	120
FIL402	120
FIL403	120
FIL404	121
FIL405	120
FIL406	120
FIL407	120
FIL408	120
FIL409	120
FIL410	120

40.IMAGE PROSSETING BOARD (C228)

FILTER

SYMBOL NO.	INDEX NO.
FIL411	121
FIL412	120
FIL413	120
FIL414	120
FIL415	120
FIL416	121
FIL417	120
FIL418	120
FIL419	120
FIL420	120

SYMBOL NO.	INDEX NO.
FIL421	120
FIL422	120

IC

SYMBOL NO.	INDEX NO.
IC401	116
IC402	110
IC403	110
IC404	110
IC405	111
IC406	110
IC407	5
IC408	148
IC409	147
IC410	147

SYMBOL NO.	INDEX NO.
IC411	147
IC412	113
IC413	2
IC414	147
IC415	147
IC416	147
IC417	110
IC418	147
IC419	147
IC420	110

SYMBOL NO.	INDEX NO.
IC421	112
IC422	4
IC423	147
IC424	147
IC425	8
IC426	147
IC427	147
IC428	147
IC429	147
IC430	3

SYMBOL NO.	INDEX NO.
IC431	6
IC432	147
IC433	114
IC434	117
IC435	11
(Socket)	108
IC436	147
IC437	7
IC438	10
(Socket)	109
IC439	115

SYMBOL NO.	INDEX NO.
IC440	1
(Socket)	108
IC441	147
IC442	147
IC443	9
IC444	9
IC445	9
IC446	9
IC447	9

OSC

SYMBOL NO.	INDEX NO.
OSC401	118

RESISTOR

SYMBOL NO.	INDEX NO.
R401	119
R402	119
R403	130
R404	123
R405	123
R406	123
R407	128
R408	128
R409	128
R410	126

SYMBOL NO.	INDEX NO.
R411	126
R412	126
R413	126
R414	126
R415	126
R416	126
R417	126
R418	123
R419	123
R420	123

SYMBOL NO.	INDEX NO.
R421	129
R422	126
R423	126
R424	126
R425	126
R426	128
R427	128
R428	128
R429	129
R430	126

SYMBOL NO.	INDEX NO.
R431	126
R432	126
R433	126
R434	123
R435	130
R436	123
R437	129
R438	128
R439	129
R440	127

SYMBOL NO.	INDEX NO.
R441	127
R442	131
R443	—
R444	124
R445	124
R446	123
R447	123
R448	123
R449	124
R450	123

SYMBOL NO.	INDEX NO.
R451	123
R452	123
R453	123
R454	123
R455	124
R456	123
R457	129
R458	124
R459	123
R460	123

40.IMAGE PROSSETING BOARD (C228)

RESISTOR

SYMBOL NO.	INDEX NO.
R461	129
R462	123
R463	129
R464	123
R465	123
R466	123
R467	123
R468	123
R469	124
R470	124

SYMBOL NO.	INDEX NO.
R471	129
R472	123
R473	123
R474	124
R475	124
R476	124
R477	123
R478	123
R479	124
R480	124

SYMBOL NO.	INDEX NO.
R481	124
R482	125
R483	128
R484	123
R485	123
R486	123
R487	128
R488	129
R489	124
R490	124

SYMBOL NO.	INDEX NO.
R491	124
R492	124
R493	124
R494	123
R495	123
R496	123
R497	123
R498	123
R499	123
R500	123

SYMBOL NO.	INDEX NO.
R501	123
R502	123
R503	128
R504	128
R505	123
R506	123
R507	123
R508	123
R509	123
R510	123

SYMBOL NO.	INDEX NO.
R511	123
R512	123
R513	123
R514	123
R515	123
R516	123
R517	128

TP

SYMBOL NO.	INDEX NO.
TP401	101
TP402	101
TP403	101

40.IMAGE PROSSETING BOARD (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
*	C228 8001	Image Processing Board	1
1	C223 8006	UVEPROM - IC440 - 256K X8 150NS	1
2	A012 5226	IC - TC19G060AF0027	1
3	A037 5222	IC - TC23SC100AF	1
4	C223 8091	IC - UPD65622GF-184-3	1
5	C228 8030	IC - Thermal Head Drive	1
6	C228 8402	Count - IC431	1
7	C228 8404	Makeup - IC437	1
8	C228 8405	EIS - IC425	1
9	C228 8450	IC - MSM511000C-70JS	1
10	C228 8004	UVEPROM - IC438 - 256K X8 150NS	1
11	C228 8005	UVEPROM - IC435 - 256K X8 150NS	1

Index No.	Part No.	Description	Q'ty Per Assembly
101	1101 0328	Connector Pin Contact	
102	1102 5571	CT Connector	
103	1102 6576	Connector - 60P	
104	1102 6602	Connector - 11P	
105	1102 7297	Connector - 120P	
106	1103 0507	Connector - 6P	
107	1103 1332	Connector - 26P	
108	1104 0373	IC Socket - 28PIN	
109	1104 0589	Dip Socket - 32p	
110	1407 1600	TTLIC - SN74LS244NS	
111	1407 1746	TTL - SN74LS240NS	
112	1407 2077	TTLIC - SN74LS138NS	
113	1407 2249	TTL - SN74LS174NS	
114	1407 3281	IC - TC74HCU04AF	
115	1407 3677	IC - MN8357	
116	1407 3708	IC - SLA7026M	
117	1407 4612	IC - CY7C167A-35VC	
118	1503 0443	Crystal Oscillator - 20mhz	
119	1600 1214	Resistor-0.68 Ω 2w	
120	1607 0477	Coil - BLM21A121SPB	
121	1607 0806	Filter - BK2125HS431	
122	1630 3101	Resistor - 100Ω - 1/10W	
123	1630 3102	Resistor - 1KΩ 1/10W ±5%	
124	1630 3103	Resistor - 10KΩ 1/10W ±5%	
125	1630 3105	Resistor - 1M Ω ±5% 1/10W	
126	1630 3202	Resistor - 2KΩ -1/10W	
127	1630 3242	Resistor - 2.4K Ω ±5% 1/10W	
128	1630 3471	Resistor - 470Ω - 1/10W	
129	1630 3472	Resistor - 4.7KΩ 1/10W ±5%	
130	1630 3473	Resistor - 47KΩ 1/10W ±5%	
131	1630 3511	Resistor - 510 Ω ±5% 1/10W	
132	1640 5101	Capacitor - 100μF±20% 50V	
133	1642 0101	Capacitor - 100μF±20% 50V	
134	1642 2470	Capacitor - 47μF±20% 25V	

Index No.	Part No.	Description	Q'ty Per Assembly
135	1642 5479	Capacitor-4.7µF50v	
136	1660 3101	Capacitor - 100pF 50V	
137	1660 3102	Capacitor - 1000pF ±5% 50V	
138	1660 3150	Capacitor - 15pF 50V	
139	1660 3151	Capacitor - 150pF ±5% 50V	
140	1660 3220	Capacitor - 122pF ±5% 50V	
141	1660 3221	Capacitor - 220pF ±5% 50V	
142	1660 3471	Capacitor - 470pF 50V	
143	1660 5103	Capacitor - 10000pF ±10% 50V	
144	1660 5222	Capacitor - 2200pF ±10% 50V	
145	1660 7104	Capacitor - 100000pF 50V	
146	1660 9104	C - 0.1µF25v	
147	1902 0003	Sram - 64k - X8 - 100ns	
148	1904 0013	SRAM 256K X8 20NS G2	

Index No.	Part No.	Description	Q'ty Per Assembly

41.MAIN CONTROL BOARD (C228)

CAPACITOR

SYMBOL NO.	INDEX NO.
C101	118
C102	165
C103	163
C104	119
C105	118
C106	118
C107	168
C108	113
C109	163
C110	118

SYMBOL NO.	INDEX NO.
C111	117
C112	117
C113	—
C114	169
C115	116
C116	165
C117	113
C118	116
C119	112
C120	112

SYMBOL NO.	INDEX NO.
C121	112
C122	112
C123	114
C124	118
C125	118
C126	168
C127	166
C128	166
C129	168
C130	118

SYMBOL NO.	INDEX NO.
C131	167
C132	167
C133	167
C134	167
C135	118
C136	118
C137	118
C138	118
C139	118
C140	118

SYMBOL NO.	INDEX NO.
C141	118
C142	116
C143	118
C144	116
C145	118
C146	119
C147	118
C148	164
C149	164
C150	118

SYMBOL NO.	INDEX NO.
C151	118
C152	117
C153	118
C154	116
C155	118
C156	—
C157	118
C158	118
C159	118
C160	118

SYMBOL NO.	INDEX NO.
C161	118
C162	118
C163	118
C164	116
C165	118
C166	118
C167	118
C168	—
C169	115
C170	118

SYMBOL NO.	INDEX NO.
C171	118
C172	118
C173	118
C174	118
C175	116
C176	118
C177	116
C178	118
C179	118
C180	118

SYMBOL NO.	INDEX NO.
C181	118
C182	119
C183	118
C184	118
C185	116

CONNECTOR

SYMBOL NO.	INDEX NO.
CN101	106
CN102	110
CN103	108
CN104	107
CN105	106
CN106	106
CN107	104
CN108	109
CN109	111
CN110	—

SYMBOL NO.	INDEX NO.
CN111	113
CN112	102
CN113	103
CN114	112
CN115	—
CN116	105

DIODE

SYMBOL NO.	INDEX NO.
D101	125
D102	125
D103	125
D104	125
D105	128
D106	128
D107	128
D108	128
D109	128
D110	128

SYMBOL NO.	INDEX NO.
D111	128
D112	128
D113	125
D114	125
D115	125
D116	129
D117	129
D118	129
D119	129
D120	129

SYMBOL NO.	INDEX NO.
D121	129
D122	129
D123	125

DPS

SYMBOL NO.	INDEX NO.
DPS101	119
DPS102	120

FILTER

SYMBOL NO.	INDEX NO.
FIL101	172
FIL102	172
FIL103	172
FIL104	172
FIL105	172
FIL106	172
FIL107	172
FIL108	172
FIL109	172
FIL110	172

SYMBOL NO.	INDEX NO.
FIL111	172
FIL112	172
FIL113	172
FIL114	172
FIL115	171
FIL116	171
FIL117	171
FIL118	171
FIL119	171
FIL120	171

SYMBOL NO.	INDEX NO.
FIL121	171
FIL122	171
FIL123	172
FIL124	172
FIL125	172
FIL126	172
FIL127	172
FIL128	172

FUSE

SYMBOL NO.	INDEX NO.
FU101	117
(CLIP)	114
FU102	118
(CLIP)	114

IC

SYMBOL NO.	INDEX NO.
IC101	132
IC102	133
IC103	127
IC104	123
IC105	123
IC106	144
IC107	139
IC108	148
IC109	1
IC110	150

SYMBOL NO.	INDEX NO.
IC111	146
IC112	151
IC113	151
IC114	140
IC115	140
IC116	145
IC117	143
IC118	210
(Socket)	118
IC119	137
IC120	131

SYMBOL NO.	INDEX NO.
IC121	124
IC122	132
IC123	3
(Socket)	115
IC124	4
(Socket)	115
IC125	138
IC126	150
IC127	132
IC128	147

SYMBOL NO.	INDEX NO.
IC129	126
IC130	133
IC131	124
IC132	149
IC133	138
IC134	135
IC135	134
IC136	136
IC137	152
IC138	141

SYMBOL NO.	INDEX NO.
IC139	136
IC140	132
IC141	—
IC142	137
IC143	142
IC144	140

L

SYMBOL NO.	INDEX NO.
L101	170

LED

SYMBOL NO.	INDEX NO.
LED101	130
LED102	130
LED103	130
LED104	130
LED105	130
LED106	130

OSC

SYMBOL NO.	INDEX NO.
OSC101	153

Q

SYMBOL NO.	INDEX NO.
Q101	122
Q102	121

41.MAIN CONTROL BOARD (C228)

RERAY

SYMBOL NO.	INDEX NO.
RAY101	157
RAY102	157
RAY103	154
RAY104	154
RAY105	154
RAY106	154
RAY107	155
RAY108	156
RAY109	155
RAY110	158

SYMBOL NO.	INDEX NO.
RAY111	158
RAY112	154
RAY113	156
RAY114	154
RAY115	154
RAY116	154
RAY117	154
RAY118	154
RAY119	154

RESISTOR

SYMBOL NO.	INDEX NO.
R101	173
R102	196
R103	192
R104	192
R105	192
R106	192
R107	175
R108	175
R109	197
R110	197

SYMBOL NO.	INDEX NO.
R111	192
R112	192
R113	192
R114	192
R115	192
R116	192
R117	176
R118	176
R119	207
R120	182

SYMBOL NO.	INDEX NO.
R121	192
R122	193
R123	193
R124	207
R125	182
R126	178
R127	176
R128	176
R129	186
R130	186

SYMBOL NO.	INDEX NO.
R131	197
R132	—
R133	186
R134	191
R135	186
R136	—
R137	178
R138	186
R139	178
R140	198

SYMBOL NO.	INDEX NO.
R141	189
R142	179
R143	196
R144	178
R145	178
R146	178
R147	178
R148	196
R149	197
R150	199

SYMBOL NO.	INDEX NO.
R151	199
R152	174
R153	187
R154	187
R155	187
R156	179
R157	203
R158	200
R159	110
R160	209

SYMBOL NO.	INDEX NO.
R161	208
R162	111
R163	184
R164	205
R165	179
R166	200
R167	177
R168	207
R169	182
R170	207

SYMBOL NO.	INDEX NO.
R171	204
R172	182
R173	207
R174	204
R175	182
R176	207
R177	204
R178	182
R179	204
R180	202

SYMBOL NO.	INDEX NO.
R181	192
R182	204
R183	192
R184	204
R185	192
R186	185
R187	195
R188	179
R189	179
R190	179

SYMBOL NO.	INDEX NO.
R191	171
R192	197
R193	171
R194	201
R195	197
R196	200
R197	171
R198	197
R199	181
R200	206

SYMBOL NO.	INDEX NO.
R201	183
R202	197
R203	178
R204	190
R205	188
R206	180
R207	178
R208	178
R209	178
R210	178

SYMBOL NO.	INDEX NO.
R211	179
R212	188
R213	194
R214	199
R215	192
R216	197
R217	197
R218	197
R219	197
R220	197

41.MAIN CONTROL BOARD (C228)

RESISTOR

SYMBOL NO.	INDEX NO.
R221	197
R222	197
R223	197
R224	197
R225	197
R226	—
R227	197
R228	197
R229	197

TP

SYMBOL NO.	INDEX NO.
TP101	101
TP102	101
TP103	101
TP104	101
TP105	101
TP106	101
TP107	101

VR

SYMBOL NO.	INDEX NO.
VR101	160
VR102	161
VR103	161
VR104	160
VR105	159
VR106	162

41.MAIN CONTROL BOARD (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
*	C228 8042	Main Control Board	1
1	C228 8049	LSI - TMP82C79M-2	1
3	C228 8045	UVEPROM - IC123 - 512K X8 150NS	1
4	C228 8047	UVEPROM - IC124 - 512K X8 - 150NS	1
101	1101 0328	Connector Pin Contact	
102	1102 4209	CT Header - 10P	
103	1102 4212	CT Header - 15P	
104	1102 4818	Connector - 20P	
105	1102 4819	Connector - 22P	
106	1102 4823	Connector - 30P	
107	1102 5219	Connector - 28P	
108	1102 5221	Connector - 26P	
109	1102 5561	Connector - 20P	
110	1102 5563	Connector - 24P	
110	1633 4991	Resistor - 4.99KΩ ±1%	
111	1102 6593	Connector - 9P	
111	1633 6041	Resistor - 6.04KΩ ±1%	
112	1102 7036	Connector - 30P	
112	1640 2101	Capacitor - 100µF±20% 25V	
113	1102 7290	Connector - 5P	
113	1640 5100	Capacitor - 10µF+20% 35V	
114	1104 0351	Fuse Holder	
114	1640 5221	Capacitor - 220µF±20% 50V	
115	1104 0373	IC Socket - 28PIN	

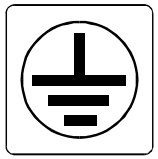
Index No.	Part No.	Description	Q'ty Per Assembly
115	1660 3101	Capacitor - 100pF 50V	
116	1104 0378	IC Socket - 24p - DICF-24CS-E	
116	1660 3102	Capacitor - 1000pF ±5% 50V	
117	1107 0413	Fuse (glass Case) - 3A - 125V	
117	1660 3151	Capacitor - 150pF ±5% 50V	
118	1107 0415	Fuse (Glass Case) - 5A - 125V	
118	1660 5103	Capacitor - 10000pF ±10% 50V	
119	1204 1015	Dip Switch	
119	1660 9104	C - 0.1µF25v	
120	1204 1481	Dip Switch	
120	1407 4514	IC - SD1642-120	
121	1400 0403	Transistor - 2SC1623L6	
122	1400 0455	Transistor - 2SC2873Y	
123	1401 0398	IC - STA402A	
124	1401 0400	Transistor Array - SLA4060	
125	1401 0835	Diode - 1SS190	
126	1401 0876	IC - PA2003GR	
127	1401 0877	IC - TD62083F	
128	1402 0476	Diode - 1SS184	
129	1402 1263	Diode - 200v - 1A	
130	1403 0669	Red LED - Slm-13vw	
131	1407 1535	IC - TD62308AP	
132	1407 1600	TTLIC - SN74LS244NS	
133	1407 1746	TTL - SN74LS240NS	
134	1407 1813	IC - SN74LS11NS	
135	1407 1882	TTLIC - SN74LS373NS	
136	1407 2077	TTLIC - SN74LS138NS	
137	1407 2187	TTLIC - SN74LS07NS	
138	1407 2218	TTLIC - SN74LS06NS	
139	1407 2261	IC - NJM2902M	
140	1407 2273	IC - TA8050P	
141	1407 2348	IC - TC4051BF	
142	1407 2594	IC - SN74LS151NS	
143	1407 3492	Cpu -78c10agf	
144	1407 3627	IC - SN74LS145NS	

Index No.	Part No.	Description	Q'ty Per Assembly
145	1407 3885	IC - Timer - UPD71054GB-10-3B4	
146	1407 4127	IC - TL7705ACPS	
147	1407 4315	IC - TE7751	
148	1407 4565	IC - TE6251	
149	1408 0456	IC - AN6914S	
150	1408 0595	IC - NJM2904M	
151	1408 0735	IC - HA17339F	
152	1408 1104	IC - MB2803pF-G	
153	1503 0570	Oscillator - 15MHZ	
154	1601 7216	Resistor Array - 4.7K Ω 1/8W	
155	1601 7220	Resistor Array - 10K Ω 1/8W	
156	1601 7377	Resistor Array - 15K Ω ±5% 1/8W	
157	1601 7396	Resistor Array - 4.7K Ω	
158	1601 7404	Resistor Array - 10K Ω 1/2W	
159	1601 8145	Variable Resistor - 5K Ω 0.5W	
160	1601 8157	Variable Resistor - 100K Ω	
161	1601 8186	Variable Resistor - 200K Ω	
162	1601 8371	Resistor 2k Ω 1/2w	
163	1604 2089	Capacitor - 1.0µF1/8W ±20%	
164	1606 1981	Capacitor - 0.0033µF±5%	
165	1606 1983	Capacitor - 0.015µF±5% 50V	
166	1606 1984	Capacitor - 0.022µF±5% 50V	
167	1606 1985	Capacitor - 0.033µF±5% 50V	
168	1606 1986	Capacitor - 0.1µF±5% 16V	
169	1606 2028	Capacitor - 0.22µF±5%	
170	1607 0001	Coil - SN-8S-500	
171	1607 0280	Inductor - Blm41	
172	1607 0477	Coil - BLM21A121SPB	
173	1611 4221	Resistor - 220 Ω 1/4T ±5%	
174	1611 6361	Resistor - 360Ω 1/8T ±5%	
175	1611 6470	Resistor - 47 Ω 1/2T ±5%	
176	1630 2101	Resistor - 100Ω 1/8W	
177	1630 2221	Resistor - 220 Ω	

Index No.	Part No.	Description	Q'ty Per Assembly
178	1630 3102	Resistor - 1KΩ 1/10W ±5%	
179	1630 3103	Resistor - 10KΩ 1/10W ±5%	
180	1630 3124	Resistor - 120Ω ±5% 1/10W	
181	1630 3133	Resistor - 13KΩ ±5% 1/10W	
182	1630 3151	Resistor - 150 Ω ±5% 1/10W	
183	1630 3154	Resistor - 150K 0HM ±5% 1/10W	
184	1630 3163	Resistor - 16K Ω ±5%	
185	1630 3203	Resistor - 20 Ω ±5% 1/10W	
186	1630 3222	Resistor - 2.2KΩ 1/10W ±5%	
187	1630 3223	Resistor - 22kΩ - 1/10W	
188	1630 3242	Resistor - 2.4K Ω ±5% 1/10W	
189	1630 3244	Resistor - 240KΩ ±5% 1/10W	
190	1630 3302	Resistor - 3kΩ - 1/10W	
191	1630 3303	Resistor - 30K Ω ±5% 1/10W	
192	1630 3332	Resistor - 3.3KΩ 1/10W ±5%	
193	1630 3333	Resistor - 33K Ω ±5% 1/10W	
194	1630 3391	Resistor - 390Ω 1/10W ±5%	
195	1630 3393	Resistor - 39K Ω 1/10W	
196	1630 3471	Resistor - 470Ω - 1/10W	
197	1630 3472	Resistor - 4.7KΩ 1/10W ±5%	
198	1630 3473	Resistor - 47KΩ 1/10W ±5%	
199	1630 3511	Resistor - 510 Ω ±5% 1/10W	
200	1630 3513	Resistor - 51KΩ ±5% 1/10W	
201	1630 3514	Resistor - 510K Ω ±5% 1/10W	
202	1630 3562	Resistor - 5.6K Ω +5% 1/10W	
203	1630 3682	Resistor - 6.8kΩ - 1/10W	
204	1630 3683	Resistor - 68KΩ ±5% 1/10W	
205	1630 3822	Resistor - 8.2K Ω 1/10W ±5%	
206	1630 3823	Resistor - 82K Ω ±5% 1/10W	
207	1630 3824	Resistor - 820KΩ ±5% 1/10W	
208	1633 3601	Resistor - 3.6KΩ ±5% 1/10W	
209	1633 4121	Resistor - 4.12KΩ ±1%	

42.DECAL AND DOCUMENT (C228)

1



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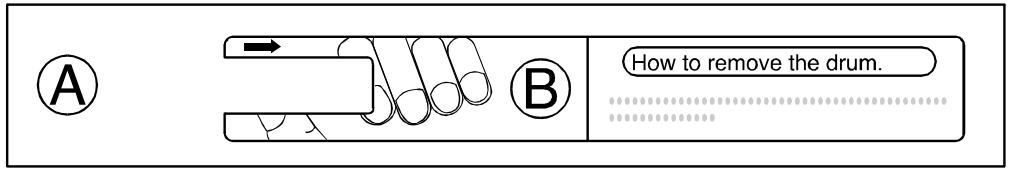

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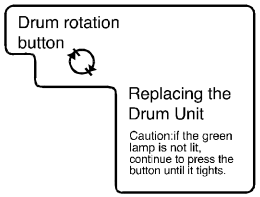
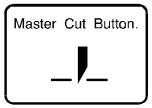

Drum rotation button
Replacing the Drum Unit
Caution:if the green lamp is not lit, continue to press the button until it tights.

3



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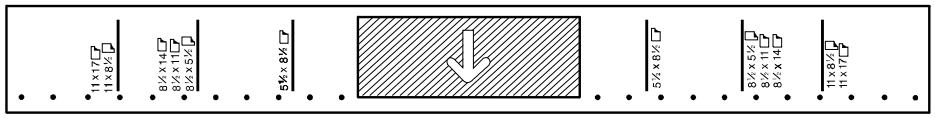

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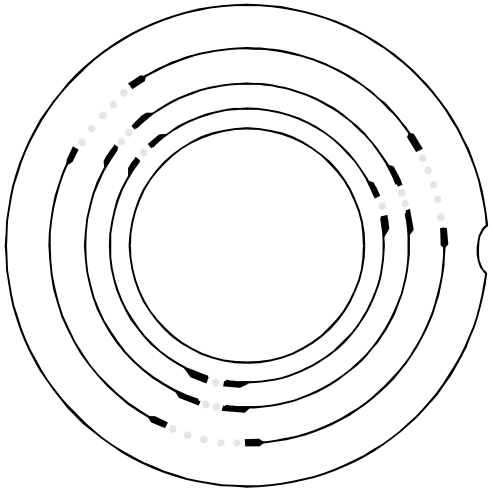

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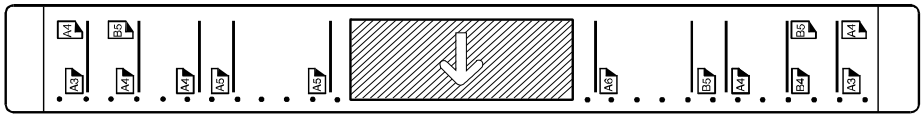

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42.DECAL AND DOCUMENT (C228)

10

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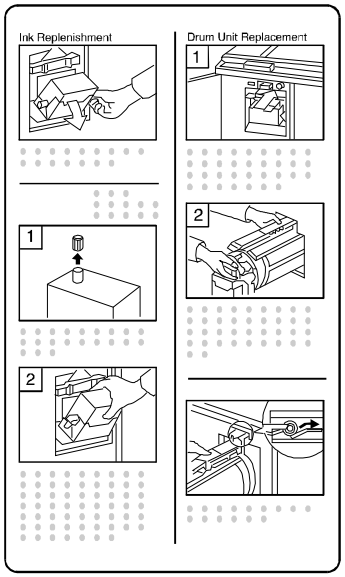

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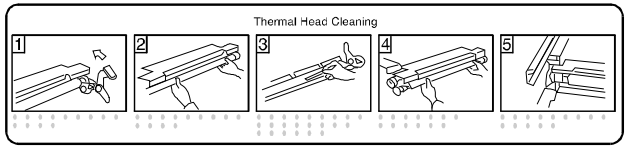

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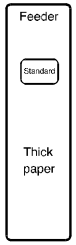

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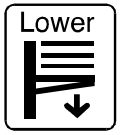


15

Transport position
position transport
posicion de transporte
posizione di trasporto
Transport-position

Operiting position
posicion travail
posicion de funzionamiento
posizione di funzionamento
Betriebs-position

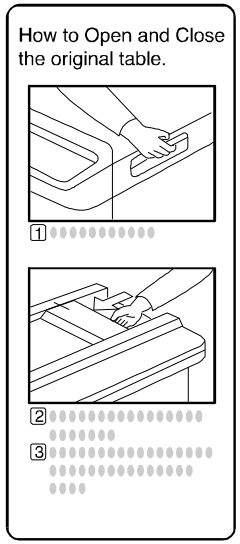
16

Operiting position
posicion travail
posicion de funzionamiento
posizione di funzionamento
Betriebs-position

Transport position
position transport
posicion de transporte
posizione di trasporto
Transport-position

42.DECAL AND DOCUMENT (C228)

17



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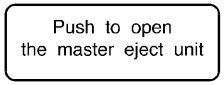

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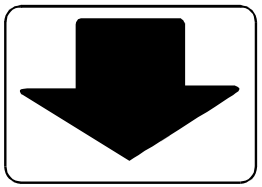

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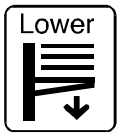

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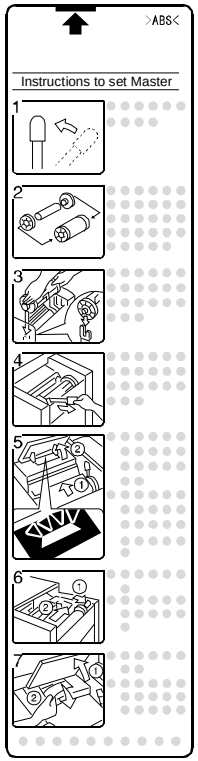
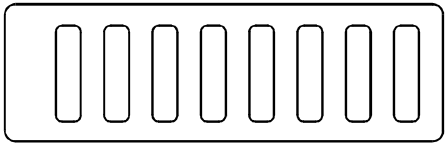


23

When you have set the new Master the cut Master should be removed by opening this cover.
(Caution)if the cut Masuter is not removed, this will cause a paper jam.

24



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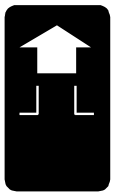

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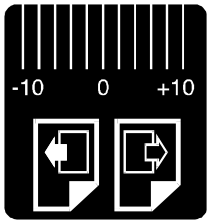

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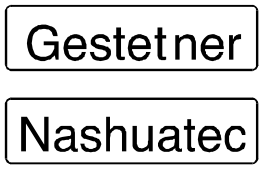

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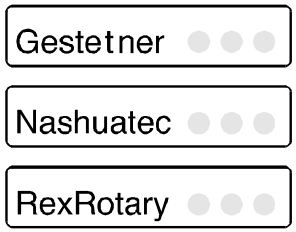

42.DECAL AND DOCUMENT (C228)

Index No.	Part No.	Description	Q'ty Per Assembly
*	C228 8600	Operating Instructions - English (RIC-EU)	1
*	C228 8607	Operating Instructions - English (RIC-LT)	1
*	C228 8690	Operating Instructions - NRG:EU	1
*	C228 8697	Operating Instructions - NRG/SAVIN NA	1
1	AA00 1190	Decal - Ground	1
2	C201 2543	Decal - Drum Caution	1
3	C203 2759	Master Cutter Decal	1
4	C210 2804	Decal - Caution	1
4	C218 2910	Caution Decal - French	1
4	C218 2911	Caution Decal - Spanish	1
4	C218 2912	Caution Decal - Italian	1
4	C218 2913	Caution Decal - German	1
5	C210 2805	Decal - Paper Size (LT)	1
6	C210 2806	Decal - Paper Size (A4)	1
7	C201 2813	Decal - Replasing tTe Drum unit	1
8	C217 2514	Decal - Main Switch	1
10	C218 2516	Decal - Original Scale - A4	1
11	C218 2816	Decal - Drum Replacement - Lt	1
12	C218 2817	Decal - Replacement	1
13	C218 2818	Decal - Paper Feed Pressure - LT	1
14	C218 2819	Decal - Paper Table Down	1
15	C218 2821	Decal Font Fixting	1
16	C218 2822	Decal - Rear Fixting	1
17	C218 2824	Decal - Original Table - LT	1
18	C218 2825	Decal - Master Eject Open	1
19	C218 2827	Decal - Master Feed	1
20	C218 2819	Decal - Paper Table Down (LT)	1
20	C218 2841	Decal - Paper Table Doun (A4)	1
21	C218 8430	Decal - Newtral	1
22	C228 2552	Caution Decal - Master Set	1
23	C222 2553	Caution Decal - Master Set	1
24	C222 2554	Decal - Mode	1
25	C223 2452	Decal - Paper Table Knob	1
26	C223 2453	Decal - Paper Level	1
27	C225 2866	Decal - Key Top Cover	1

Index No.	Part No.	Description	Q'ty Per Assembly
27	C225 2867	Decal - Cover - Panel - Nashua	1
27	A153 6409	Decal - Keytop Cover	1
28	C228 2864	Model Name Plate - SVN 3400DNP	1
28	C228 2865	Model Name Plate - GES 5390	1
28	C228 2866	Model Name Plate - REX 1295	1
28	C228 2867	Model Name Plate - NSA CP385	1

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C228 2811	Rear Upper Cover	11- 20
C228 2831	Operation Panel Ass'y (A4)	11- 17
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C228 2865	Model Name Plate - GES 5390	97- 28
C228 2866	Model Name Plate - REX 1295	97- 28
C228 2867	Model Name Plate - NSA CP385	97- 28
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C228 3063	Timing Pulley	63- 19
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C228 4025	Mater Roller Holder	69- 7
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C228 4082	Worm Wheel	71- 33
C228 4083	Pressure Release Shaft	71- 29
C228 4084	Drive Gear	71- 35
C228 4085	Motor Bracket	71- 32
C228 4088	Lower Guide Plate Ass'y	71- 18
C228 4091	Reverse Guide	71- 13
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RICOH Modification Bulletin

Model: PRIPORT NA6	**Date:** 15-Jun-99	**No: MC228001**
Modified Article: Upper and Lower Master Eject Belts	**Prepared by:**	
From: Priport Service Planning Section	H. Kokubo	

Classification:
- ☐ Parts catalog correction
- ☐ Vendor change
- ☐ To meet standards ( )
- ☐ To facilitate assembly
- ☒ To improve reliability
- ☐ Part standardization
- ☐ Other ( )

Model Name:

Ricoh VT6000, Gestetner 5390, RexRotary 1295, nashuatec CP390, SVN 3400DNP

The upper and lower master eject belts have been changed as follows. The new parts have more tolerance against stretching when used over a long period of time.

Old #	New #	Description	Qty	Int	Page	Index
C219 3605	C219 3611	Upper Belt	5 → 5	X/O	75	28
C219 3606	C219 3612	Lower Belt	5 → 5	X/O	75	29

Model: PRIPORT NA6	**Date:** 15-Jun-99	**No: MC228001**

CUT IN SERIAL NUMBERS

Model Name	V/Hz	Destination	Code	Serial Number
Ricoh VT6000	120/60	USA, Canada	C228-17	C355 9040001
Ges 5390, Rex 1295, Nsa CP390	230/50	Europe, etc.	C228-22	AQ0 9040001
Ricoh VT6000	230/50	Europe, etc.	C228-27	C355 9040001
Ges 5390, Rex 1295, Nsa CP390, Savin 3400DNP	120/60	USA, Canada	C228-51	AP9 9040001